ORDER NO. APD 9204026

Service Manual

AUTO PRODUCTS

COMPACT disc DIGITAL AUDIO

CQ-DP37VEG/LEE

CD Player AM / FM Receiver
CD-Spieler / UKW / LW / MW-Empfänger

- NTT has applied for trademark registration for MASH.

FEATURES

- 32bit-times oversampling MASH 1bit 4-DAC system.
- Digital servo for reliable playback.
- Table of Contents (T. O. C) information display.
- 3" CD singles compatible.
- 12-FM, 6-AM, 6-VF presets with preset scan (CQ-DP37VEG).
- 18-FM, 6-AM presets with preset scan (CQ-DP37LEE).
- Switchable FMO, AFE, and INQ.
- Intelligent volume control and switchable beep on/off.
- Quick-release bracket.

MERKMALE

- 32bit-faches Oversampling-MASH, 1-bit-, 4-DAC System.
- Digital-Servo für zuverlässige Wiedergabe.
- Informationsanzeige des Inhaltsverzeichnisses (T. O. C).
- Für 3"-C- Singles kompatibel.
- 12 UKW-, 6 LW/MW-, 6 VF-Festsender mit Festsender-Suchlauf (CQ-DP37VEG).
- 18 UKW-, 6 LW/MW-Festsender mit Festsender-Suchlauf (CQ-DP37LEE).
- Auf FMO, AFE und INQ umschaltbar.
- Intelligente Lautstärkeregelung und ein-/ausschaltbarer Piepton.
- Schnellentriegelbare Halterung.

Panasonic

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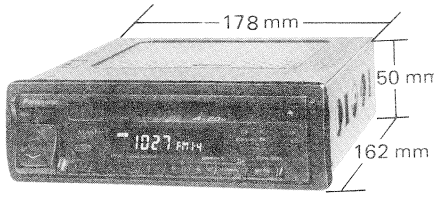
DIMENSIONS / ABMESSUNGEN



Specifications*

General

Power Supply	:	DC 12V (11V - 16V), Test Voltage 14.4V Negative Ground
Maximum Power Output	:	4×20W, 4×9W (DIN45 324 at 4Ω)
Tone Action	:	Bass: ± 10dB at 100Hz Treble: ± 10dB at 10kHz
Loudness Control	:	+ 8dB at 100Hz, + 6dB at 10kHz
Pre-Amp Output Voltage	:	1V (CD Operation ;1kHz, 0dB)
Output Impedance	:	600Ω
Current Consumption	:	Less than 2.5A (CD Operation, 0.5W×4 Output)

FM Stereo Radio

Frequency Range	:	87.5 - 108MHz
Intermediate Frequency	:	10.7MHz
Usable Sensitivity	:	0dB/μV (S/N 10dB)
FM Stereo Sensitivity	:	6dB/μV

MW Radio

Frequency Range	:	531 - 1,602kHz
Intermediate Frequency	:	450kHz
Usable Sensitivity	:	26dB/μV (25μV, S/N 20dB)

LW Radio

Frequency Range	:	153 - 279kHz
Intermediate Frequency	:	450kHz
Usable Sensitivity	:	28dB/μV (25μV, S/N 20dB)

CD Player

Sampling Frequency	:	32 times oversampling
DA Converter	:	MASH·1bit/4 DAC System
Error Correction System	:	Panasonic Super Decoding Algorithm
Pick-Up Type	:	Astigma 3-beam
Light Source	:	Semiconductor laser
Wavelength	:	780 nm
Frequency Response	:	20Hz to 20,000Hz (±1dB)
Signal to Noise Radio	:	90dB
Total Harmonic Distortion	:	0.01% (1kHz)
Wow and Flutter	:	Below measurable limit
Channel Separation	:	75dB

Dimensions**

Main unit	:	178 (W)×50 (H)×162 (D) mm
Bracket	:	182 (W)×53 (H)×165 (D) mm

Weight**

Main unit	:	1.7kg
Bracket	:	0.5kg

* Specifications and the design are subject to possible modification without notice due to improvements.

** Dimensions and Weight shown are approximatme.

Technische Daten*

Allgemeines

Spannungsversorgung	:	12V (11V - 16V), Gleichspannung, Testspannung 14.4V, negative Erdung
Höchstausgangsleistung	:	4×20W, 4×9W (DIN45 324 bei 4Ω)
Klangregelung	:	Bässe: ± 10dB bei 100Hz Höhen: ± 10dB bei 10kHz
Loudness-Regelung	:	+ 8dB bei 100Hz, + 6dB bei 10kHz
Vorverstärker Ausgangsspannung	:	1V (CD-Betrieb, 1kHz, 0dB)
Ausgangsimpedanz	:	600Ω
Leistungsaufnahme	:	Weniger als 2.5A (CD-Betrieb 0.5W×4 Ausgang)

UKW-Stereo-Tunerteil

Frequenzbereich	:	87.5 - 108MHz
Zwischenfrequenz	:	10.7MHz
Anwendbar Empfindlichkeit	:	0dB/μV(Signal /Rauschabstand / 10dB)
UKW-Stereo Empfindlichkeit	:	6dB/μV

MW-Tunerteil

Frequenzbereich	:	531 - 1,602kHz
Zwischenfrequenz	:	450kHz
Anwendbar Empfindlichkeit	:	26dB/μV (25μV, Signal /Rauschabstand 20dB)

LW-Tunerteil

Frequenzbereich	:	153 - 279kHz
Zwischenfrequenz	:	450kHz
Anwendbar Empfindlichkeit	:	28dB/μV (25μV, Signal /Rauschabstand 20dB)

CD Spieler

Abtastfrequenz	:	32-fach Oversampling
D/A-Wandler	:	MASH·1bit/4 DAW- System
Fehlerkorreoturverfahren	:	Panasonic Super Decoding Algorithm
Abtastsystem	:	Astigma-Dreistrahl
Lichtquelle	:	Halbleiter-Laser
Wellenlänge	:	780 nm
Frequenzgang	:	20Hz bis 20,000Hz (±1dB)
Signal/Rauschabstand	:	90dB
Klirrgrad	:	0.01% (1kHz)
Gleichlaufschwankungen	:	Unter der Meßgrenze
Kanaltrennung	:	75dB

Abmessungen**

Haupteinheit	:	178 (B)×50 (H)×162 (T)mm
Halterung	:	182 (B)×53 (H)×165 (T)mm

Gewicht**

Haupteinheit	:	1.7kg
Halterung	:	0.5kg

* Technische Daten und Ausführung können sich ändern ohne besondere Ankündifung bei gebühren den Verbasserungen.

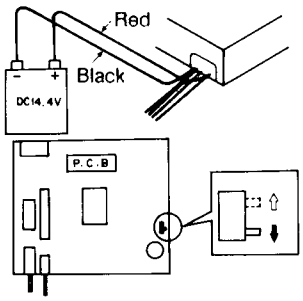
** Abmessungen und Gewicht in angenäherten Wertenangegeben.

WARNING!
Lithium batteries. Explosion danger.
Change of batteries must only be done by qualified personnel and as described in the service manual. Furthermore, that the batteries must only be changed with batteries of the same manufacture and type.

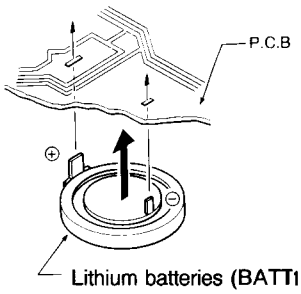
WARNUNG!
Lithium-Batterien. Explosionsgefahr.
Die Batterien dürfen nur von qualifiziertem Personal und gemäß Beschreibung in der Wartungsanleitung ausgetauscht werden.
Die Batterien dürfen nur durch Batterien des gleichen Herstellers und Typs ersetzt werden.

■ BATTERY REPRACEMENT

(1) Remove the top cover, bottom cover, and deck asembly.
(2) Use the connector CN700 (YEAE011835) connect 14.4V to Red-lead and Yellow-lead, and Black-lead to ground, and set power switch is on.
(3) Keep SW700 to the arrow ⇧ direction.
(4) Unsolder the bwattery terminals on the pattern end and replace the battery with a new one.
(5) Keep SW700 to the arrow ⇩ direction.



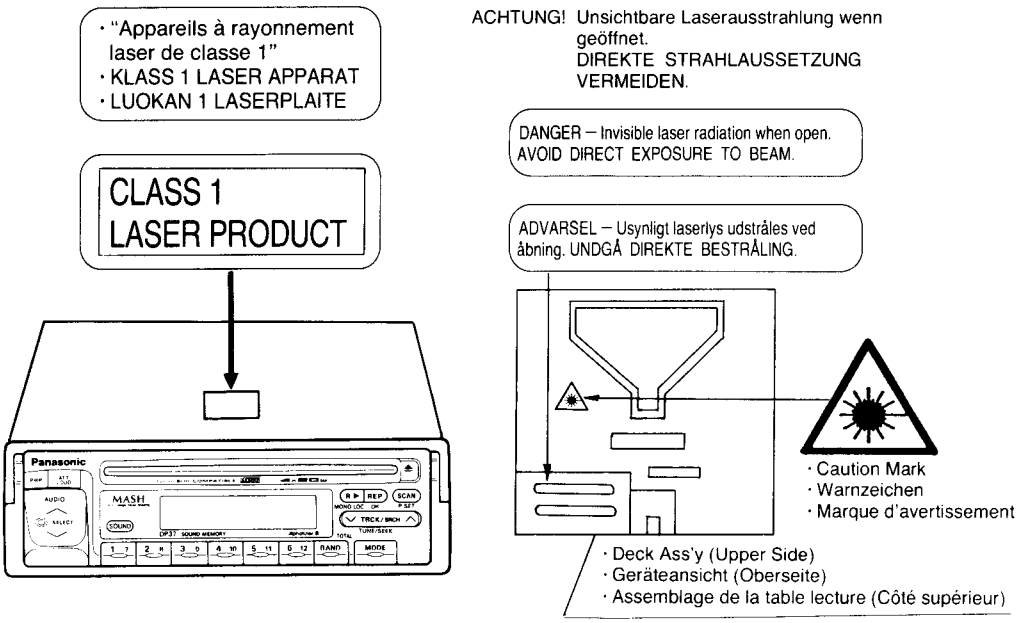
• NOTES:
After the battery replacement, install the deck assembly and check that all the functions of the set operate normally.



■ RADIO ALIGNMENT / RADIOABGLEICH

Do not align the AM and FM package blocks. When the package block is necessary, it will be supplied already aligned at the factory.

· LABEL INDICATIONS AND THEIR LOCATIONS
· WARNETIKETTEN UND WO SIE ANGEBRACHT SIND
· INDICATIONS PORTÉES LES ÉTIQUETTES ET EMPLACEMENT


· "Appareils à rayonnement laser de classe 1"
· KLASS 1 LASER APPARAT
· LUOKAN 1 LASERPLAITE
CLASS 1
LASER PRODUCT
ACHTUNG! Unsichtbare Laserausstrahlung wenn geöffnet.
DIREKTE STRAHLAUSSETZUNG VERMEIDEN.
DANGER – Invisible laser radiation when open.
AVOID DIRECT EXPOSURE TO BEAM.
ADVARSEL – Usynligt laserlys udstråles ved åbning. UNDGÅ DIREKTE BESTRÅLING.
Panasonic
· Caution Mark
· Warnzeichen
· Marque d'avertissement
· Deck Ass'y (Upper Side)
· Geräteansicht (Oberseite)
· Assemblage de la table lecture (Côté supérieur)

LASER PRODUCTS

Caution
This product utilizes a laser.
Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

Do not take apart this unit or attempt to make any changes yourself.
This unit is a very intricate device that uses a laser pick-up to retrieve information from the surface of compact discs.
The laser is carefully shielded so that its rays remain inside the cabinet.
Therefore, never try to disassemble the player or alter any of its parts since you may be exposed to laser rays and dangerous voltages.

Laser products;
Wave Length _____ 780 nm
Laser Power _____ No hazardous radiation is emitted with safety protection.

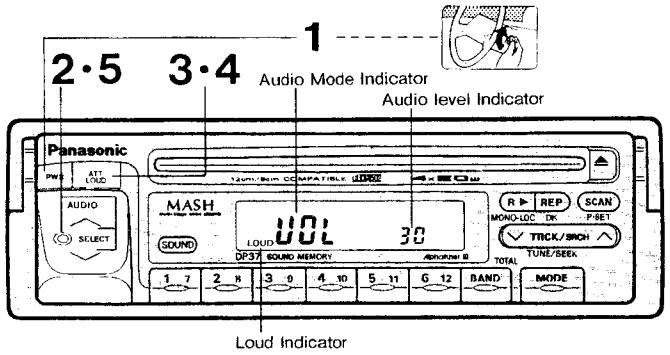
LASER ERZEUGNISSE

Vorsicht
Dieses Gerät arbeitet mit Laserstrahl.
Benutzung der Bedienungselemente oder Verhänderungen oder Betriebsweise anders als hierin beschrieben, kann zu gefährlicher Strahlenaussetzung führen.

Öffnen Sie dieses Gerät nicht und versuchen Sie unter keinen Umständen am Gerät herumzubasteln.
Dieses Gerät ist ein sehr kompliziertes Instrument welches einen Laserstrahl benutzt um die auf der Oberfläche der Disc gespeicherten Informationen abzulesen.
Der Lasestrahl ist sorgfältig abgeschirmt sodaß die Strahlung innerhalb des Gerätes verbleibt.
Aus diesem Grunde öffnen Sie das Gerät auf keinen Fall und versuchen Sie unter keinen Umständen Geräteteile zu verändern, Sie können sich unter Umständen gefährlicher Strahlung und Stromspannung aussetzen.

Laser Erzeugnisse:
Wellenlänge ___ 780 nm
Laser Energie __ Mit Sicherheitsschutz entweicht keine gefährliche Strahlung.

Common Operating Procedures



1 First time use

Turn the ignition key to ON (ACC) and press the power switch.

2 To adjust the volume

Press " ∧ " audio control to increase the volume level.
Press " ∨ " audio control to decrease the volume level.
" VOL " and level indicator (" 0 " - " 30 ") will be illuminated.

3 To turn down the volume instantly

- Press the ATT button. Volume will decrease to about 1/10 of its previous level. " VOL " and level indicator will blink.
- To return to the previous volume level, press this button again.

4 To emphasize bass/treble at low/medium volume levels

- Press the LOUD button for at least 2 seconds to switch on the loud feature. The bass and treble characteristics will be emphasized when listening at low or medium volume levels. ("LOUD" indicator will be illuminated.)
- Press the LOUD button again for at least 2 seconds to turn off the loud function.

5 To change the audio mode

SELECT Each time this button is pressed, the audio mode will change in the following sequence;

BASS → TREBLE → BALANCE
↑ ↓
VOLUME ← FADER

When a control mode is selected but no operation is made within five seconds, the display will return to the normal operation (volume adjustment) mode. In such a case, press the SELECT button again to select the next control mode.

Sensor Tone On/Off Switch

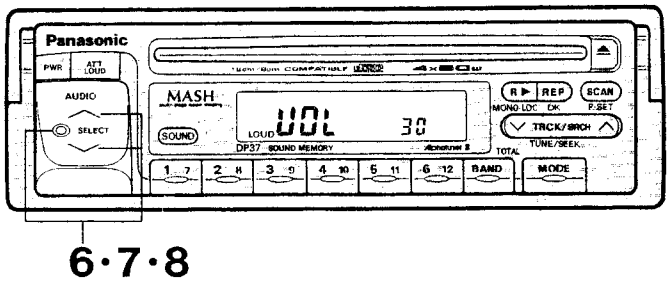
The sensor tone can be switched on and off. The sensor tone can be heard confirming that a control button has been pressed.

To activate the sensor tone;

Press the SELECT button for more than 2 seconds. The display panel will show " BEEP " and changes to " On " or " OFF ".

After that the display panel will return to the normal (previous-mode) display.

Common Operating Procedures (Cont'd.)



6 To adjust the bass and treble

SELECT ❶ Press the SELECT button until the BASS (TRE) mode is selected. " BASS " (" TRE ") will be illuminated.
∧ ❷ Press the " ∧ " audio control to increase the bass/treble response.
∨ ❸ Press the " ∨ " audio control to decrease the bass/treble response. The bass/treble level indicator ("-10" - "10") will be illuminated.

7 To adjust the left/right balance

SELECT ❶ Press the SELECT button until the BALANCE mode is selected. " BAL " will be illuminated.
∧ ❷ Press the " ∧ " audio control to shift the sound volume to the right speakers.
∨ ❸ Press the " ∨ " audio control to shift the sound volume to the left speakers. The balance level indicator ("0"-"15") will be illuminated.

8 To adjust the front/rear balance

SELECT ❶ Press the SELECT button until the FADER mode is selected. " FAD " will be illuminated.
∧ ❷ Press the " ∧ " audio control to shift the sound volume to the front speakers.
∨ ❸ Press the " ∨ " audio control to shift the sound volume to the rear speakers. The fader level indicator ("0" - "15") will be illuminated.

Most-Recent Memory:

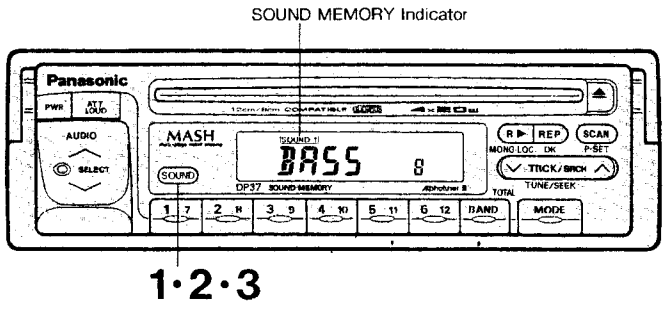
- This unit is designed for the volume level to be memorized automatically in its respective functions (AM band, FM band, CD player). It means when a desired volume level for each function has been set, which will be stored respectively in memory even if any selection is made among the functions. Therefore, this feature enables you free from the trouble of resetting each volume along with the function selection.
- When the power is switched off, the unit will retain all function settings last heard when the unit is turned off and automatically returns to those settings the next time the unit is turned on.

Note: This unit is equipped with anti-volume-blast circuit which serves as an automatic volume level adjuster so that you will not be deafened with sudden loud volume. This system works like this. When the ATT button was switched off and the next time the unit is turned on again, the volume level will automatically be adjusted to a certain volume degree, and then the volume level will gradually go back to its previous level prior to switching off the unit.

Common Operating Procedures (Cont'd.)

Sound Memory

With this unit's Sound Memory features, you can store your favorite bass/treble levels in two memories (SOUND1, SOUND2) and can recall them whenever you desire.



1 To change SOUND MEMORY mode

Press the SOUND button to switch the sound mode as in the following order.

Normal → SOUND1 → SOUND2

2 Setting Sound Memory

❶ Press the SOUND button to select SOUND1 (or SOUND2).
❷ Press and hold the SOUND button for at least 2 seconds to switch the memory mode. "SOUND1"(or "SOUND2") indicator will blink.
❸ Adjust Bass and Treble by following to the procedures on the page 4, and select your favorite sound.
❹ When desired selections have been made, press and hold the SOUND button for at least 2 seconds to memorize them in SOUND1 (or SOUND2).

- This operation should be done within 5 seconds after the desired selections have been made. Failure to do this will return to the previous mode to the selection.
- When the memory setting has been completed, BASS and TRE will alternately blink twice for a half second with each set level indicated.

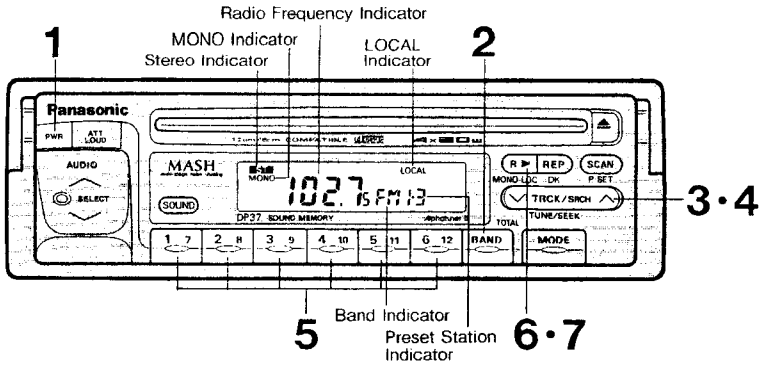
Note:
The following shows the initial setting levels of this unit.

- SOUND 1 → emphasizing each bass and treble by 8 dB
- SOUND 2 → emphasizing treble by 4 dB.

3 Recalling Sound Memory

Press the SOUND button to select SOUND1 (or SOUND2). "SOUND1" (or "SOUND2") indicator will be illuminated, and the set Sound Memory is activated.

Radio Play Operations (for CQ-DP37VEG)



1 To change tuner mode

Press the PWR button on.

2 To select the desired band

Each time this button is pressed, the band will change in the following order;

FM1 → FM2 → AM(LW/MW) →

Initial operation is preset for FM1 band.

3 Manual tuning

By pressing the "∨ TUNE/SEEK" or "TUNE/SEEK ∧" button, you can tune the frequency downward or upward.

4 Seek tuning

Press the "∨ TUNE/SEEK" or "TUNE/SEEK ∧" button for more than a half second, seek tuning will operate and stop automatically on the next strong station. Continue this operation until you find the desired station.

Note: While the disc is inserted, press the mode button to change CD mode.

5 To tune in a preset station

Press the preset buttons to recall the previous preset stations.

6 To reduce interference during FM stereo broadcasts (MONO Button)

Press the MONO button to switch monaural reception in case much interference is present in an FM stereo signal or to improve the listening quality of weak FM broadcasts.
"MONO" indicator will be illuminated.

7 Switch from DX to LOC

Normally, searching stops even at a weak wave station. To stop searching at a strong wave station only, press this button.
"LOCAL" indicator will be illuminated.

For items 6 and 7

Modes are switched in the following sequence when the MONO·LOC button is pressed repeatedly.

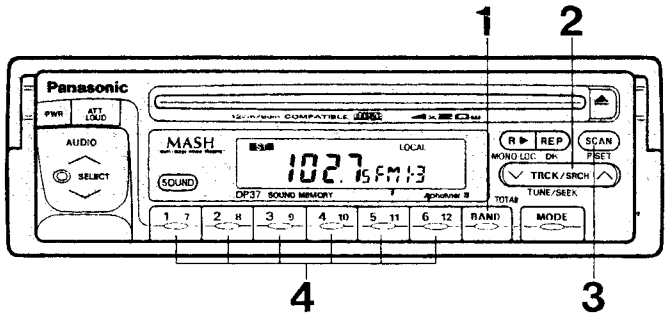
MONO OFF DX MODE → MONO ON DX MODE → MONO ON LOC MODE → MONO OFF LOC MODE →

Radio Play Operations (Cont'd.) (for CQ-DP37VEG)

Preset Station Setting

Up to 24 stations can be preset in the station memory as follows;

FM1	FM2	AM(LW/MW)	VF
6 stations	6 stations	6 stations	6 stations



1 To select the desired band

Press this button to select FM1, FM2 or AM(LW/MW) mode.

2 To tune in the station you want to listen to.

You can tune in a desired station either by manual tuning or seek tuning.

3 Auto preset - Preset scan

Auto preset:

Hold this button for at least 2 seconds. Up to 6 strongest stations along the frequency band will automatically preset into six preset buttons (1 - 6). Scan will immediately follow from preset number 1 as soon as the auto preset is completed. Press the "P · SET" again when reaching the desired station. This can be done on any band.

Preset scan:

Press this button to scan each preset stations for 5 seconds. When reaching the station, simply press the "P·SET" again to cancel the preset scanning.

Note: FM1, FM2 cannot be scanned continuously.

4 To memorize the station in the memory

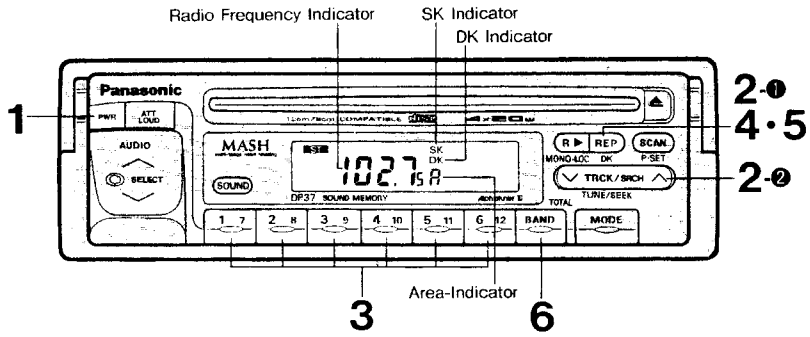
Press one of the preset buttons for several seconds. Release when the radio frequency indicator blinks once. The memory has been set.

Preset other stations on other bands in the same manner.

Note: If any of these station selectors is accidentally pressed and held for several seconds, the previously preset station will be erased; instead, a different station will be registered into that memory circuit in which the band is playing.

Radio Play Operations (Cont'd.) (for CQ-DP37VEG)

Listening to traffic-information broadcast (VF)



SK Reception

1 Press the power to switch on.

2 ❶ Press the DK button to select VF mode. "SK" indicator blinks.

❷ Tune in the traffic information broadcast, manually or by seek tuning ("∨" TUNE/SEEK"∧" button). When tuned, the "SK" indicator will light up. "A, B-F" indications will be displayed.

3 Presetting the VF station.

Six VF stations can be preset into the six preset buttons (1 - 6). To preset, hold the preset station selector in for about 2 seconds.

DK Reception

4 Press the DK button.

DK tuning is used for listening to VF broadcast only. Other programs will be cut off.

5 Returning to the SK mode.

Press the DK button again.

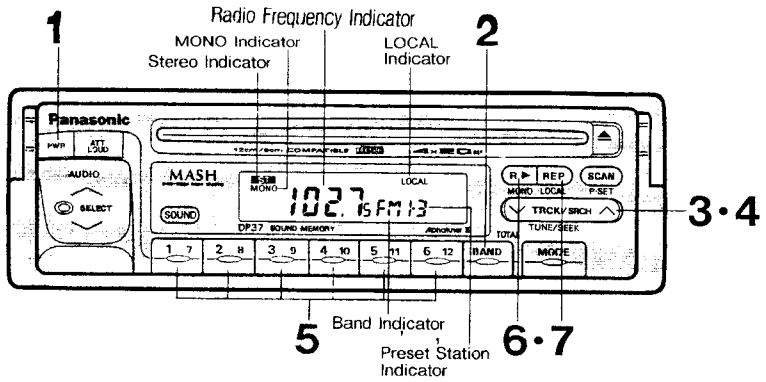
6 Cancelling traffic-information broadcast (VF).

Press the BAND button again.

Notes:

- During CD play, the VF broadcast station can still be heard automatically as long as the "DK" is switched on.
- If you drive away from the tuned in VF broadcast station, the signal will become weak, and the "SK" indicator will blink.
  The "SK" search tuning will be automatically operated. When tuned, the "SK" indicator will light up.

Radio Play Operations (for CQ-DP37LEE)



1 To change tuner mode
Press the PWR button on.

2 To select the desired band
Each time this button is pressed, the band will change in the following order;

→ FM1 → FM2 → FM3 → AM(LW/MW) →

Initial operation is preset for FM1 band.

3 Manual tuning
By pressing the "∨ TUNE/SEEK" or "TUNE/SEEK ∧" button, you can tune the frequency downward or upward.

4 Seek tuning
Press the "∨ TUNE/SEEK" or "TUNE/SEEK ∧" button for more than a half second, seek tuning will operate and stop automatically on the next strong station. Continue this operation until you find the desired station.

Note: While the disc is inserted, press the mode button to change CD mode.

5 To tune in a preset station
Press the preset buttons to recall the previous preset stations.

6 To reduce interference during FM stereo broadcasts (MONO Button)
Press the MONO button to switch monaural reception in case much interference is present in an FM stereo signal or to improve the listening quality of weak FM broadcasts. "MONO" indicator will be illuminated.

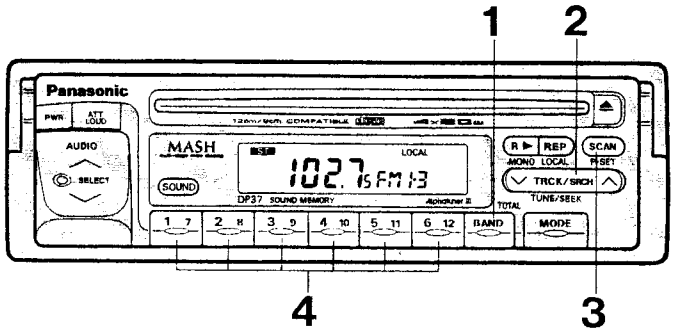
7 Switch from DX to LOC
Normally, searching stops even at a weak wave station. To stop searching at a strong wave station only, press this button.
"LOCAL" indicator will be illuminated.

Radio Play Operations (Cont'd.) (for CQ-DP37LEE)

Preset Station Setting

Up to 24 stations can be preset in the station memory as follows;

FM1	FM2	FM3	AM (LW/MW)
6 stations	6 stations	6 stations	6 stations



1 To select the desired band
Press this button to select FM1, FM2, FM3 or AM(LW/MW) mode.

2 To tune in the station you want to listen to.
You can tune in a desired station either by manual tuning or seek tuning.

3 Auto preset - Preset scan

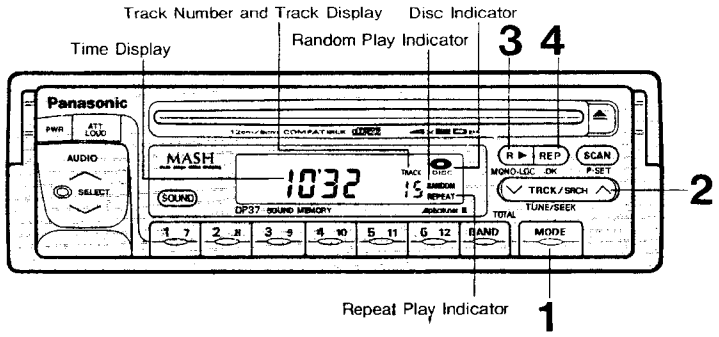
Auto preset:
Hold this button for at least 2 seconds. Up to 6 strongest stations along the frequency band will automatically preset into six preset buttons (1 - 6). Scan will immediately follow from preset number 1 as soon as the auto preset is completed. Press the "P·SET" again when reaching the desired station. This can be done on any band.

Preset scan:
Press this button to scan each preset stations for 5 seconds. When reaching the station, simply press the "P·SET" again to cancel the preset scanning.

Note: FM1, FM2 and FM3 cannot be scanned continuously.

4 To memorize the station in the memory
Press one of the preset buttons for several seconds. Release when the radio frequency indicator blinks once. The memory has been set.
Preset other stations on other bands in the same manner.
Note: If any of these station selectors is accidentally pressed and held for several seconds, the previously preset station will be erased; instead, a different station will be registered into that memory circuit in which the band is playing.

CD Play Operations



1 To change mode

Insert the disc and playback starts automatically. (While the disc is inserted, press the MODE button to switch the CD Control mode. At this time, the DISC indicator is displayed.)

2 To select the track that you want to listen to.

Press "∨" or "∧" button to select track.
Press "∧" button once to play the beginning of the next track.
Press "∨" button once to replay from the beginning of the music just listened to.
Press "∨" button twice to replay from the beginning of the previous track.
Press "∨" or "∧" button for more than a half second during CD playback to search (fast backward or fast forward).
To end the search mode, Press "∨" or "∧" again.

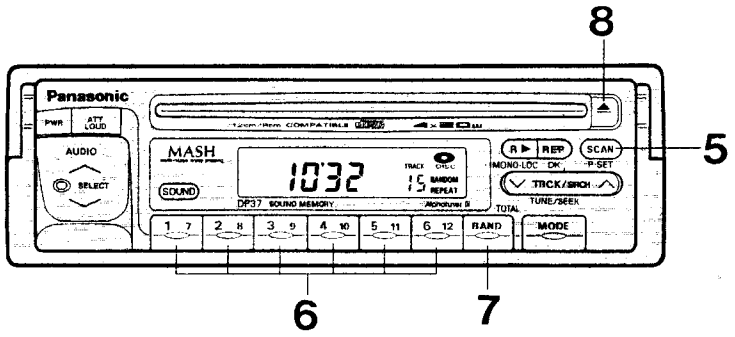
3 Random play

- Press the "R▶" button to play the tracks in random orders. "RANDOM" indicator will be illuminated.
  Random play is automatically selected by the unit's built-in micro-processor.
- To turn off random operation, press this button again.

4 Repeat play

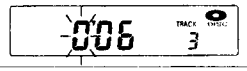
- Press the REP button to repeat the track you are now listening to automatically.
  "REPEAT" indicator will be illuminated.
- To turn off repeat operation, press this button again.

CD Play Operations (Cont'd.)



5 SCAN play

- Press the SCAN button. The display blinks and the first 10 seconds of each track on the disc play in sequence.
- To stop scanning and continue with the current track, press this button again.



6 Direct Access play

❶ To play tracks 1 - 6, press button 1 - 6.
❷ To play tracks 7 - 12, press and hold button 7 - 12 for at least 1 second.

7 Total track number and total disc play time

Press the TOTAL button to display the total track number and total disc play time on the display panel.
After those indicators blink for 5 seconds, display will return to the previous display mode automatically.

8 Disc eject

Press ⏏(eject) button to stop CD play and the disc will quietly eject from the CD slot. (During disc ejection, "Ed" will be illuminated.)

Note: Press the mode button during CD playback to change tuner mode.

Conditions of Display

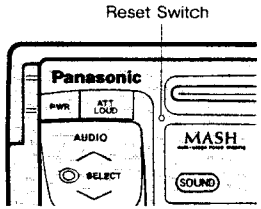
DISPLAY	DESCRIPTION
LOAd	Illuminated during loading of disc into the CD slot.
EJ	Illuminated during disc ejection.

Error Display

DISPLAY	DESCRIPTION
E-1	Blinks when the compact disc is dirty or when it is inverted. After blinking for 5 seconds, the disc is ejected automatically.
E-2	Blinks when the compact disc has a scratch on it. After blinking for 5 seconds, the disc is ejected automatically.
E-3	Illuminated when the unit stops operating for some reason. Press "⏏"(eject) button or reset switch on this unit. If it will not eject and the "E-3" reappears, there should be something wrong.

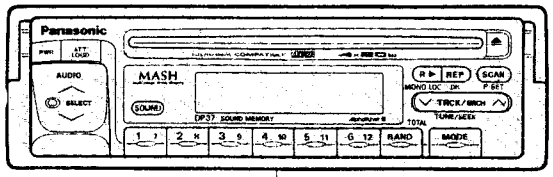
Reset Switch

Used if an abnormal noise occurs or when any of the disc operating buttons will not work normally. Press this switch by a pointed object.



Anti-Theft System

This removable unit gives you a chance to fight the rising tide of car radio theft. Now you can keep thieves from stealing your Panasonic car audio unit by removing it yourself when your car is left unattended.



Handle:
Use the handle to pull out the unit from its bracket and take it with you when you leave the car. SWITCH OFF THE UNIT BEFORE PULLING THE HANDLE TO REMOVE IT FROM THE CAR.

How to Remove and Install the Unit

Removal:

1. Switch off the power.
2. Press a protrusion on the handle, and the handle lifts up. (Fig. 1, ❶, ❷)
3. Remove the unit from the bracket by pulling the handle firmly. (Fig. 1, ❸)

Installation:

Insert and push the main unit fully into its bracket. The unit will be locked in automatically.
A "click" sound can be heard when the safety lock is engaged.

Caution;

1. Before removing the unit, make sure it has been switched off.
2. It is dangerous to operate the unit with the safety lock released. Thus, when operating the unit be sure the handle is in its original down position, and always make sure the unit is fully pushed into the mounting bracket.
3. After operating the unit for several hours, it will become very hot especially on the right side. Please be aware of this and pay careful attention.
4. The unit is not water-proof. Therefore, do not expose it to water nor excessive moisture.
5. Do not abuse the unit by hitting, dropping or swinging the unit while carrying by its handle.
6. For safety reasons, do not remove the unit from its mounting bracket and avoid use of the presetting and programming function while driving your car.

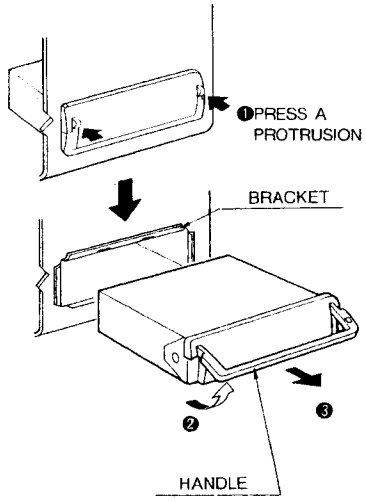


Fig. 1

Installation

Notes:
- Before installation check the radio operation with antenna and speakers.
- Disconnect the cable from the negative (−) battery terminal.

Unit In-dash Installation

Installation Opening

In-dash installation can be done if the car's dashboard has an opening for this unit as shown in Fig. 2. The car's dashboard should have a thickness of 4.5mm - 6mm in order to make the installation of the unit.

To Remove the Unit from the Quick Release Bracket

The unit is inserted and locked in the quick release bracket at the factory. The unit can be released by following the steps below:

1. Switch off the power.
2. Push the safety lock to release the unit from the bracket.
3. Lift the handle. (Fig. 3, ❶).
4. Remove the unit from its bracket by pulling the handle firmly. (Fig. 3, ❷)

Installation Procedures

1. Insert the quick release bracket into the car's dashboard and bend the mounting springs correspondingly by means of a screwdriver, as shown in Fig. 3.
2. Before final mounting the quick release bracket to the car's dashboard, read "To Secure the Rear of the Quick Release Bracket" which is explained in the next page and check whether the rear of the unit is properly secured to the fire wall of car.
   Also check the electrical connections by referring to this installation instructions. Mount the quick release bracket to the car's dashboard as shown in Fig. 3.
3. Now insert the unit into the quick release bracket.
4. After installation reconnect the negative (−) battery terminal.

Installation Parts List

Illust. No.	Description	Q'ty
(1)	Quick Release Bracket	1
(2)	Rear Support Strap	1
(3)	Hex. Bolt (5mmϕ x 25mm)	1
(4)	Hex. Nut (5mmϕ)	2
(5)	Spring Washer (5mmϕ)	2
(6)	Plain Washer (5mmϕ)	2
(7)	Toothed Lock Washer (5mmϕ)	1
(8)	Mounting Bolt	1

Fig. 2

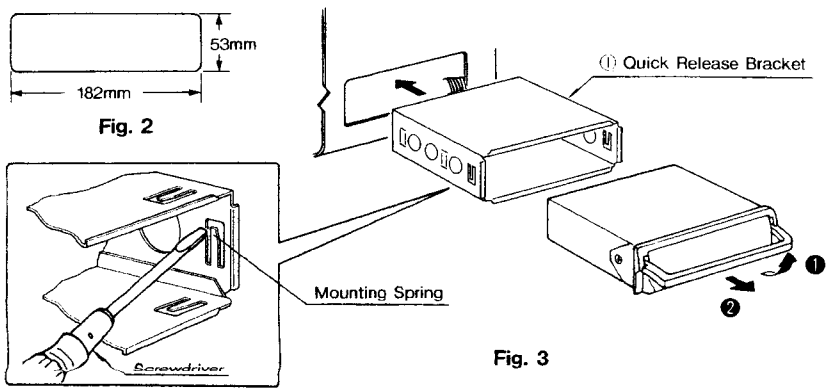


Fig. 3

Installation (Cont'd.)

To Secure the Rear of the Quick Release Bracket:

■ Using the Rear Support Strap (See Fig. 4)

Fix one end of the rear support strap to the rear of the quick release bracket, and the other end to the Fire Wall of Car, or some other metallic area.

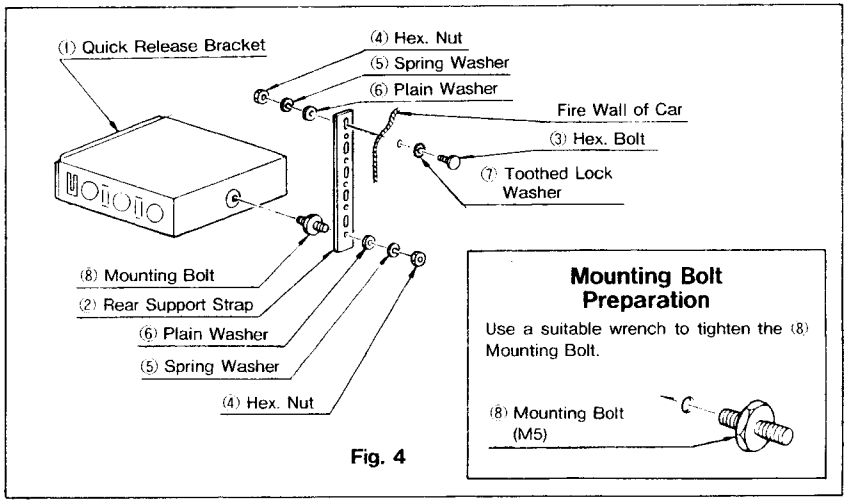


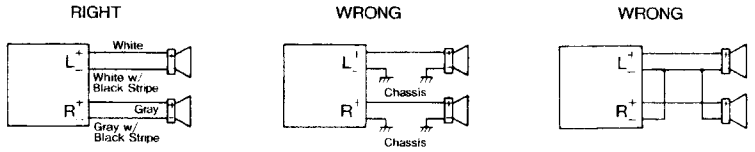
Fig. 4

Caution:
- Do not pull the handle and remove the unit when the safety lock is engaged.

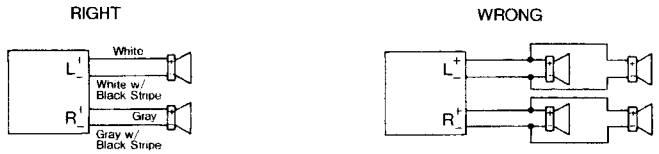
Speaker Connections

CAUTION:
1. Use ungrounded speakers only.
2. The speakers to be used with this unit should be able to handle more than 20W of audio power. If an optional amplifier is used, the speakers should be able to handle the maximum output power of the amplifier. Use of speakers with small input ratings can cause damage to the speakers.
3. The speaker impedance should be 4 - 8 ohms. If the impedance is too large or too small, it affects the output and may cause damage to the speakers or this unit.
4. Do not use 3-wire type speaker system having a common earth lead. Never connect the speaker cord to the body of the car. This unit uses the BTCL circuit, so each speaker should be connected separately using parallel vinyl insulated cords.
5. The speaker cords and the power amplifier unit should be kept away (about 30cm apart) from the antenna and antenna extension cord.
6. Follow the connection diagram below carefully. Failure to do so may cause damage to both unit and speakers.

- **Unit will be damaged if speakers (Front, Rear) are not connected properly.**



- **Do not connect more than one speaker to one set of speaker leads.**



Fuse

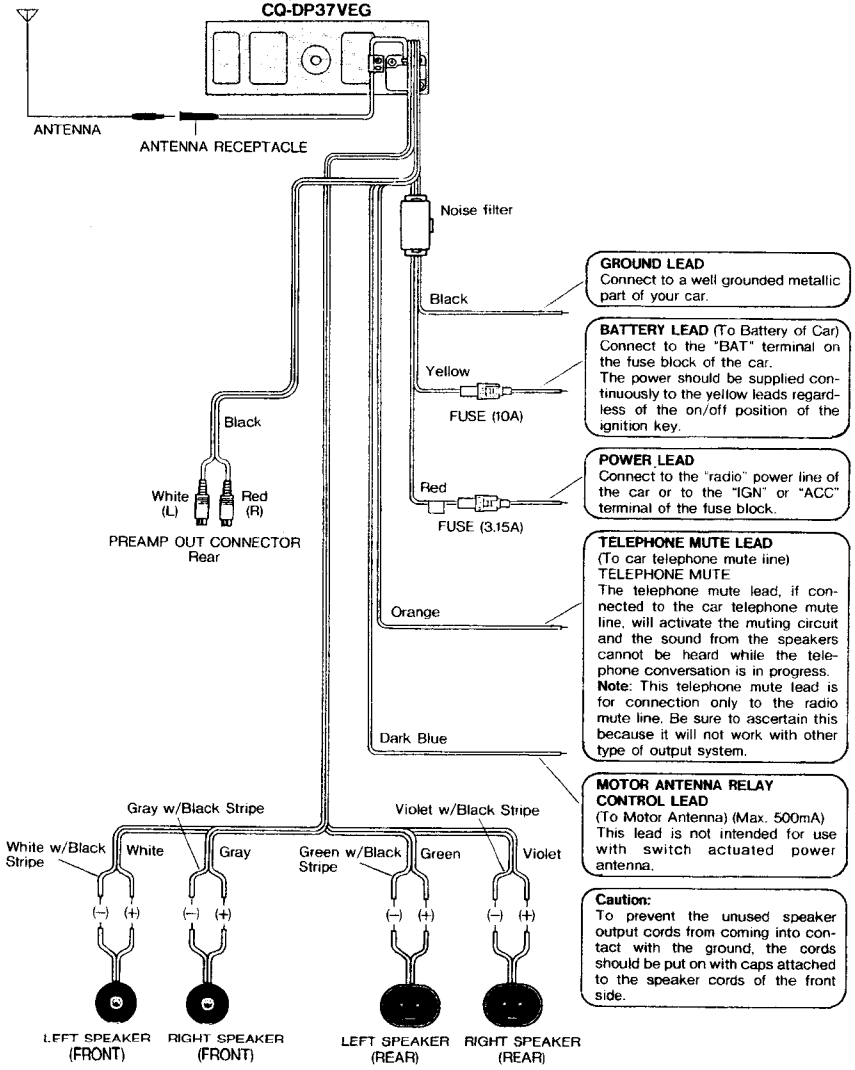
Be sure to use a fuse of the specified rating (3.15A, 10A) when replacing a blown fuse. Fuses with higher capacity ratings, use of any substitute, or connection without a fuse may result in a fire hazard or damage to the unit.

Maintenance

To clean the exterior of this unit, use a soft cloth to wipe the surface. Do not use benzine, thinner, or any other type of solvents.

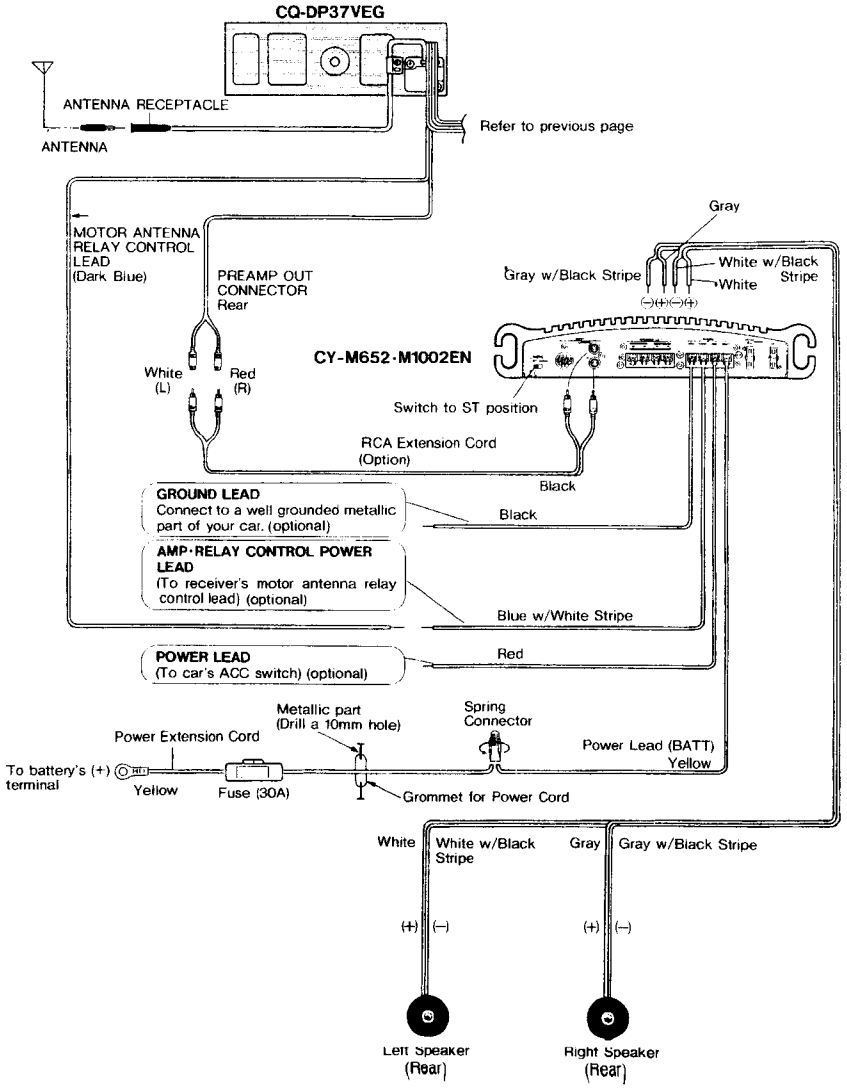
Electrical Connection

Caution:
- To prevent damage to the unit be sure to follow the connection diagram below.
- Be sure to insulate any exposed wires from a possible short-circuit from the car chassis. Bundle all cables and keep cable terminals free from touching any metal parts.


CQ-DP37VEG
ANTENNA
ANTENNA RECEPTACLE
Noise filter
Black
Yellow
FUSE (10A)
Red
FUSE (3.15A)
Black
White (L)
Red (R)
PREAMP OUT CONNECTOR Rear
Orange
Dark Blue
Gray w/Black Stripe
White w/Black Stripe
White
Gray
Violet w/Black Stripe
Green w/Black Stripe
Green
Violet
(–) (+)
LEFT SPEAKER (FRONT)
RIGHT SPEAKER (FRONT)
LEFT SPEAKER (REAR)
RIGHT SPEAKER (REAR)
GROUND LEAD
Connect to a well grounded metallic part of your car.
BATTERY LEAD (To Battery of Car)
Connect to the "BAT" terminal on the fuse block of the car.
The power should be supplied continuously to the yellow leads regardless of the on/off position of the ignition key.
POWER LEAD
Connect to the "radio" power line of the car or to the "IGN" or "ACC" terminal of the fuse block.
TELEPHONE MUTE LEAD
(To car telephone mute line)
TELEPHONE MUTE
The telephone mute lead, if connected to the car telephone mute line, will activate the muting circuit and the sound from the speakers cannot be heard while the telephone conversation is in progress.
Note: This telephone mute lead is for connection only to the radio mute line. Be sure to ascertain this because it will not work with other type of output system.
MOTOR ANTENNA RELAY CONTROL LEAD
(To Motor Antenna) (Max. 500mA)
This lead is not intended for use with switch actuated power antenna.
Caution:
To prevent the unused speaker output cords from coming into contact with the ground, the cords should be put on with caps attached to the speaker cords of the front side.

Electrical Connection (Cont'd.)

In Combination with 2 Channel Bridgeable Power Amplifier, CY-M652·M1002EN (Optional)



Notes on Compact Disc

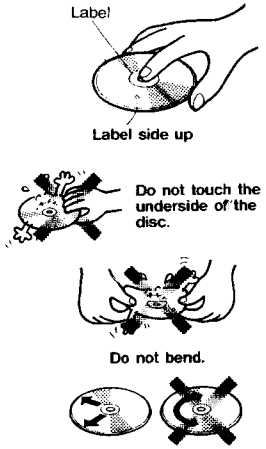
ONLY USE DISCS CARRYING LABEL SHOWN ON THE RIGHT

COMPACT disc DIGITAL AUDIO

- Dirt, dust, scratches and bending of disc will cause misoperation. Handle discs with care.
- Do not place stickers or make scratches on disc.
- Do not bend discs.
- Disc should always be kept in the case when not in use to prevent from damaging.
- Do not place discs in the following places:
  1. Direct sunlight;
  2. Dirty, dusty and damp areas;
  3. Near car heaters;
  4. Seats and dashboard.

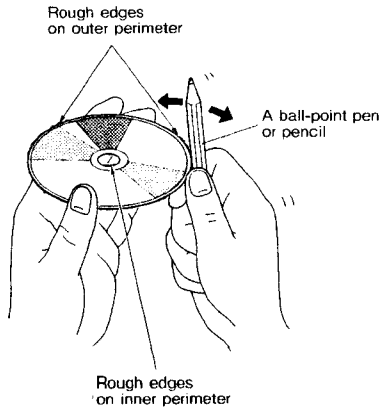
Disc Cleaning

Use a dry soft cloth to wipe the surface. If the disc is quite dirty use a soft cloth slightly dampened in isopropyl (rubbing) alcohol. Never use solvents such as benzine, thinner, conventional record cleaner, or mopper as they may mar the surface of the disc.

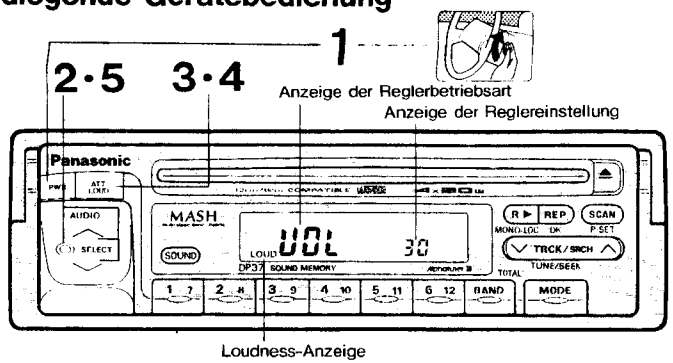


Caution for use of a new Disc

A new disc may have rough edges on its inner and outer perimeter. If a disc with rough edges is used, proper setting will not be possible and the CD player will not play the disc. Therefore, remove the rough edges in advance by using a ball-point pen or pencil as shown on right. To remove the rough edges, press the side of the pen or pencil against the inner and outer perimeter of the disc.



Grundlegende Gerätebedienung



1 Einschalten des Geräts

Drehen Sie den Zündschlüssel auf ON (oder ACC), und betätigen Sie den Netzschalter des Geräts.

2 Einstellung der Lautstärke

Betätigen Sie die Reglertaste "∧", um die Lautstärke anzuheben.
Betätigen Sie die Reglertaste "∨", um die Lautstärke zu senken.
"VOL" und die Pegelanzeige ("0" - "30") leuchten nun auf.

3 Schnelles Senken der Lautstärke

- Betätigen Sie die ATT-Taste. Die Lautstärke wird sofort auf 1/10 des vorigen Pegels gesenkt. "VOL" und die Pegelanzeige blinken nun.
- Betätigen Sie diese Taste erneut, um zum vorigen Lautstärkepegel zurückzukehren.

4 Anheben der Höhen/Bässe bei geringer und mittlerer Lautstärke

- Drücken Sie mindestens 2 Sekunden lang auf die LOUD-Taste, um die gehörrichtige Lautstärkeregelung (Loudness) einzuschalten. Die Baa- und Höhenfrequenzen werden verstärkt, wenn der Lautstärkepegel niedrig bis mittelhoch ist. (Dabei leuchtet die "LOUD"-Anzeige auf.)
- Die LOUD-Taste mindestens 2 Sekunden erneut drücken, um die Loudness-Funktion auszuschalten.

5 Wechseln der Reglerbetriebsart

SELECT Mit jedem Tastendruck wechselt die Betriebsart in der Reihenfolge:

BASS → TREBLE (Höhen) → BALANCE
↑ ↓
VOLUME (Lautstärke) ← FADER

Wenn Sie eine Betriebsart gewählt haben, binnen fünf Sekunden aber keine Einstellung vornehmen, springt die Anzeige wieder in den normalen Zustand (Lautstärke-Einstellung) zurück. Zur Wahl der nächsten Betriebsart brauchen Sie nur wieder die SELECT-Taste zu drücken.

Sensortonschalter

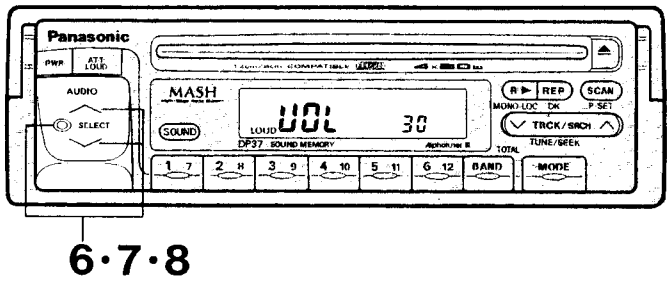
Der Sensorton läßt sich ein- und ausschalten. Mit dem Sensorton können Sie hören, ob eine Funktionstaste korrekt gedrückt wurde.

Aktivieren des Sensortons:

Drücken Sie die SELECT-Taste mindestens 2 Sekunden lang. Die Anzeige zeigt nun "BEEP" und wechselt dann auf "On" oder "OFF".

Danach kehrt die Anzeige in den normalen (vorigen) Zustand zurück.

Grundlegende Gerätebedienung (Fortsetzung)



6 Einstellung von Baß- und Höhenpegel

SELECT ❶ Drücken Sie die SELECT-Taste, bis auf der Anzeige BASS (bzw. TRE) erscheint. Dabei leuchtet "BASS" ("TRE") auf.
∧ ❷ Betätigen Sie die Reglertaste "∧", um die Bässe bzw. Höhen anzuheben.
∨ ❸ Betätigen Sie die Reglertaste "∨", um die Bässe bzw. Höhen zu senken. Dabei leuchtet die Baß- bzw. Höhenanzeige ("-10" - "10") auf.

7 Einstellung der Links/Rechts-Balance

SELECT ❶ Betätigen Sie die SELECT-Taste, bis auf der Anzeige BALANCE erscheint. "BAL" leuchtet dann auf.
∧ ❷ Drücken Sie auf die "∧" Reglertaste, um das Klanggewicht zu den rechten Lautsprechern hin zu verschieben.
∨ ❸ Drücken Sie auf die "∨" Reglertaste, um das Klanggewicht zu den linken Lautsprechern hin zu verschieben. Dabei leuchtet die Balance-Anzeige ("0" - "15") auf.

8 Einstellung der Vorne/Hinten-Balance

SELECT ❶ Betätigen Sie die SELECT-Taste, bis auf der Anzeige FADER erscheint. "FAD" leuchtet dann auf.
∧ ❷ Drücken Sie auf die Reglertaste "∧", um das Klanggewicht zu den vorderen Lautsprechern hin zu verschieben.
∨ ❸ Drücken Sie auf die Reglertaste "∨", um den Klanggewicht zu den hinteren Lautsprechern hin zu verschieben. Dabei leuchtet die Fader-Anzeige ("0" - "15") auf.

Speicherung aller Einstellungen:

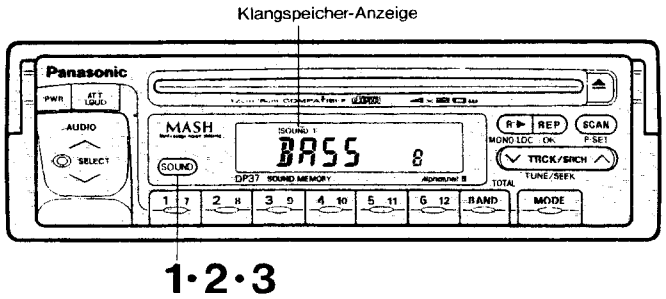
- Dieses Gerät ist so ausgelegt, daß der Lautstärkepegel in den einzelnen Betriebsarten (LW/MW-Empfang, UKW-Empfang, CD-Wiedergabe) automatisch gespeichert wird. Dies bedeutet, daß ein gewünschter Lautstärkepegel, der für die jeweilige Betriebart eingestellt worden ist, selbst beim Umschalten zwischen den Betriebsarten im Speicher erhalten bleibt. Diese Einrichtung erspart Ihnen daher bei der Betriebsartenwahl die Mühe einer Neueinstellung der Lautstärke.
- Wenn Sie das Gerät ausschalten, bleiben alle Einstellungen dieses Augenblicks gespeichert. Wenn Sie das Gerät beim nächsten Mal wieder einschalten, werden alle beim vorigen Mal benutzten Einstellungen sofort wieder aktiviert.

Hinweis: Das Gerät ist mit einer Lautstärkeschock-Schutzschaltung ausgestattet, womit die beim letzten Mal gehörte Lautstärke automatisch reguliert wird. Das funktioniert so: Wenn Sie das Gerät bei ausgeschalteter ATT-Taste ausschalten und dann später wieder einschalten, wird der gespeicherte Lautstärkepegel zuerst automatisch um einen bestimmten Betrag gesenkt, um dann schrittweise wieder zum Pegel des vorigen Mals zurückzukehren.

Grundlegende Gerätebedienung (Fortsetzung)

Klangspeicherung

Mit Hilfe der Klangspeicher-Einrichtung dieses Gerätes ist es möglich, Ihre bevorzugten Baß- und Höhenpegel in zwei Speichern (SOUND1, SOUND2) abzuspeichern und zu jedem beliebigen Zeitpunkt abzurufen.



1 Zum Ändern der Klangspeicher-Betriebsart

Drücken Sie die SOUND-Taste, um die Klangspeicher-Betriebart in der folgenden Reihenfolge umzuschalten.

Normal → SOUND1 → SOUND2

2 Einstellung der Klangspeicher-Einrichtung

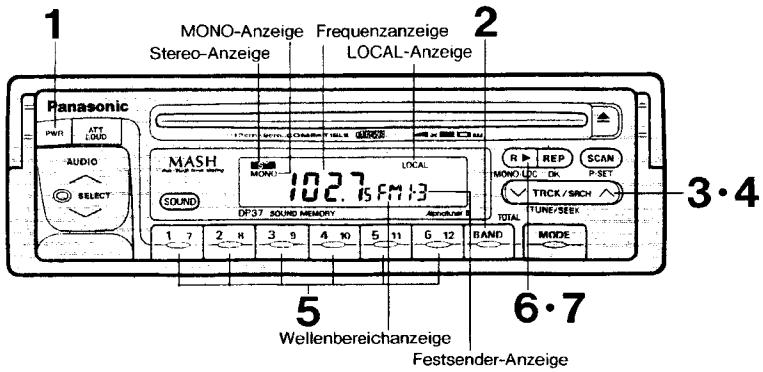
❶ Drücken Sie die SOUND-Taste, um den Klangspeicher 1 (SOUND 1) oder den Klangspeicher 2 (SOUND2) zu wählen.
❷ Drücken Sie die SOUND-Taste, und halten Sie diese mindestens 2 Sekunden lang nieder, um die Speicher-Betriebsart umzuschalten. Die Anzeige "SOUND1" (oder "SOUND2") blinkt.
❸ Nehmen Sie die Baß- und Höhenregelung gemäß dem Bedienungsverfahren auf Seite 22 vor, um Ihren Lieblingsklang zu wählen.
❹ Nachdem die gewünschten Einstellungen vorgenommen worden sind, drücken Sie die SOUND-Taste, und halten Sie diese mindestens 2 Sekunden lang nieder, um die Einstellungen im Klangspeicher 1 (SOUND1) oder im Klangspeicher 2 (SOUND2) zu speichern.
- Dieser Bedienungsschritt sollte innerhalb von 5 Sekunden nach Vornehmen der gewünschten Einstellung ausgeführt werden, weil sonst eine Umschaltung auf die frühere Betriebsart erfolgt.
- Nach Beendigung der Speichereinstellung blinken die Anzeigen "BASS" und "TRE" abwechselnd jeweils eine halbe Sekunde lang auf, wobei jeder eingestellte Pegel angezeigt wird.

Zur Beachtung:
Die ursprüngliche Pegeleinstellung dieses Gerätes ist wie folgt:
- Klangspeicher 1 (SOUND 1) → Anhebung der Bässe und Höhen um jewils 8 dB.
- Klangspeicher 2 (SOUND 2) → Anhebung der Höhen um 4 dB

3 Klangspeicher-Abruf

Drücken Sie die SOUND-Taste, um den Klangspeicher 1 (SOUND1) oder den Klangspeicher 2 (SOUND2) zu wählen. Die Anzeige "SOUND1" (oder "SOUND2") leuchtet auf, und der eingestellte Klangspeicher wird aktiviert.

Rundfunkempfang



1 Umschalten auf Tuner-Betrieb

Betätigen Sie die PWR-Taste.

2 Wahl eines Wellenbereichs

Mit jedem Tastendruck schaltet der Tuner auf den nächsten Wellenbereich, und zwar in dieser Folge:

→ FM1(UKW1) → FM2(UKW2) → AM(LW/MW) →

Der Tuner ist zuerst auf FM1 eingestellt.

3 Manuelle Abstimmung

Mit den Tasten "∨TUNE/SEEK" oder "TUNE/SEEK∧" können Sie auf niedrigere oder höhere Frequenzen wechseln.

4 Sendersuchlauf

Drücken Sie mindestens eine halbe Sekunde lang auf die TUNE/SEEK-Tasten "∨TUNE/SEEK" oder "TUNE/SEEK∧", um den Sendersuchlauf zu aktivieren. Der Tuner stimmt automatisch auf den nächsten starken Sender ab. Bedienungsvorgang fort, bis Sie den gewünschten Sender auffinden.

Hinweis: Wenn Sie die Betriebsarttaste bei eingelegter Compact-Disc betätigen, wird auf CD-Betrieb gewechselt.

5 Abruf gespeicherter Sender

Vorher eingestellte Sender lassen sich mit den Festsendertasten abrufen.

6 Störungsbeseitigung bei Empfang verrauschter FM (UKW)-Stereosendungen (MONO-Taste)

Bei stark verrauschten FM (UKW)-Stereosignalen bzw. zur Verbesserung der Empfangsqualität schwacher FM (UKW)-Stereosendungen die MONO-Taste drücken, um auf MONO-Empfang umzuschalten. Dabei leuchtet die "MONO"-Anzeige auf.

7 Umschaltung von Fernempfang auf Ortssenderempfang

In der Regel stoppt der Suchlauf auch bei relativ schwachen Sendern. Damit beim Sendersuchlauf ausschließlich starke Stationen berücksichtigt werden, diese Taste gedrückt halten.
Dabei leuchtet die "LOCAL"-Anzeige auf.

Für Punkte 6 und 7.
Mit MONO·LOC-Taste kann der Empfangsstatus folgendermaßen weitergeschaletet werden:

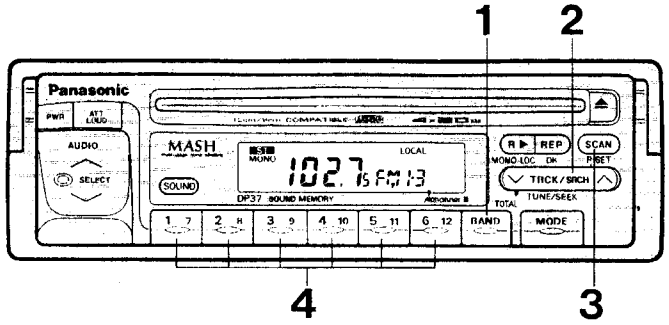
MONO AUS FERNEMPFANG → MONO EIN FERNEMPFANG → MONO EIN ORTSEMPFANG → MONO AUS ORTSEMPFANG

Rundfunkempfang (Fortsetzung)

Einstellung von Festsendern

Bis zu 24 Sender lassen sich im voraus abstimmen und speichern:

FM1	FM2	AM(LW/MW)	VF
6 Sender	6 Sender	6 Sender	6 Sender



1 Wahl eines Wellenbereichs

Wählen Sie den gewünschten Wellenbereich unter FM1, FM2 oder AM (LW/MW) mit dieser Taste.

2 Abstimmen eines gewünschten Senders

Stimmen Sie den gewünschten Sender entweder manuell oder über die Sendersuchlauf-Funktion ab.

3 Auto Preset - Preset Scan

Auto Preset (Automatische Festsenderwahl):

Halten Sie diese Taste mindestens 2 Sekunden lang gedrückt. Bis zu 6 der stärksten Sender des gegenwärtigen Wellenbereichs werden nun den sechs Festsendertasten (1 bis 6) zugeordnet. Der Sendersuchlauf beginnt sofort mit Festsendertaste 1, sobald die automatische Voreinstellung erfolgt ist. Betätigen Sie "P·SET" erneut, wenn ein gewünschter Sender abgestimmt ist. Die Tasten können mit Sendern verschiedener Wellenbereiche belegt werden.

Preset Scan (Festsendersuchlauf):

Drücken Sie diese Taste, um den nächsten Festsender jeweils 5 Sekunden lang anspielen zu lassen. Betätigen Sie "P · SET" erneut, sobald ein gewünschter Senderaufgefunden ist; der Suchlauf wird damit unterbrochen.

Hinweis: FM1, FM2 können nicht ununterbrochen auf Sender abgetastet werden.

4 Abspeichern eines Senders

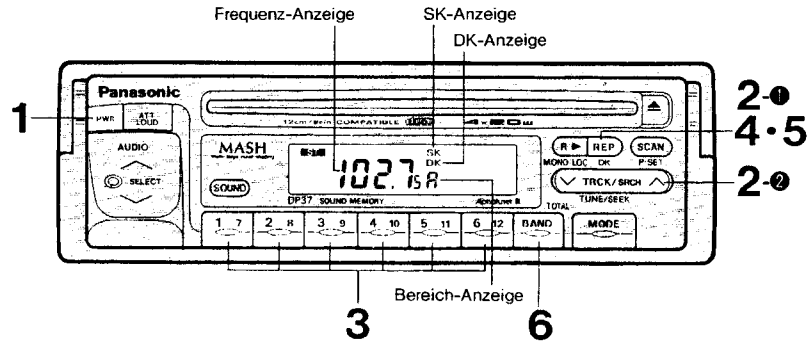
Drücken Sie eine der Festsendertasten mehrere Sekunden lang. Lassen Sie die Taste los, wenn die Frequenz-Anzeige einmal aufblinkt. Der Sender ist damit eingespeichert.

Speichern Sie weitere Sender auch anderer Wellenbereiche auf gleiche Weise ab.

Hinweis: Falls Sie einmal versehentlich eine Festsendertaste mehrere Sekunden lang drücken, wird der dort eingespeicherte Sender gelöscht und stattdessen der Sender der gegenwärtig gehörten Frequenz eingespeichert.

Rundfunkempfang (Fortsetzung)

Empfang von Verkehrsfunksendungen (VF)



SK (Sender Kennung)-Empfang

1 Den Knopf im Uhrzeigersinn drehen, um die Stromversorgung einzuschalten.

2 ❶ Mit der DK-Taste VF-Betrieb wählen. Die "SK"-Anzeige blinkt nun.

❷ Einen Verkehrsfunksender manuell oder per Suchlauf abstimmen (Taste "∨" TUNE/SEEK "∧"). Zur Bestätigung leuchtet die SK-Anzeige auf. Es erscheinen die Anzeigen "P1, P2 - P5".

3 Speichern von VF-Sendern

Sechs VF-Sender können unter den sechs Festsendertasten (1 - 6) gespeichert werden. Zur Vorprogrammierung den Festsenderwähler etwa 2 Sekunden lang gedrückt halten.

DK (Durchsage Kennung)-Empfang

4 Die Taste DK drücken.

Bei der DK-Abstimmung wird ausschließlich nach VF-Sendern gesucht. Andere Sender werden übersprungen.

5 Rückschaltung zur SK-Betriebsart.

Wieder die Taste DK drücken.

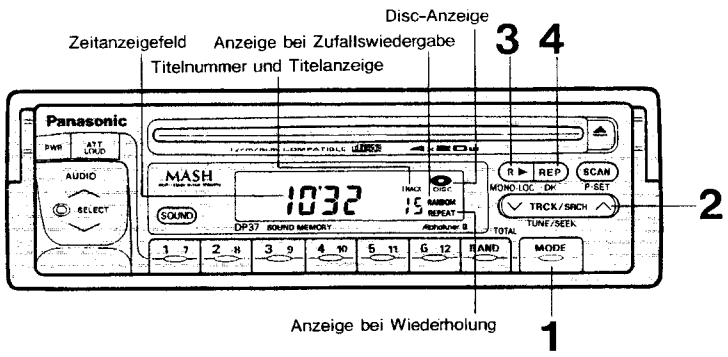
6 Abschalten des Verkehrsfunkempfangs (VF).

Die BAND-Taste erneut mindestens drücken.

Hinweiss:

- Auch bei der Compact-Disc-Wiedergabe werden Verkehrsfunkdurchsagen automatisch empfangen, solange DK aktiviert ist.
- Wenn die Entfernung zum eingestellten VF-Sender zu groß wird, fällt die Signalstärke unter den vorgegebenen Wert, und die "SK" Anzeige blinkt nun. Der "SK"-Suchlauf beginnt automatisch. Bei Abstimmung leuchtet die "SK"-Anzeige auf.

Bedienung des Compact-Disc-Spielers



1 Umschalten der Betriebsart

Nach Einlegen der Compact-Disc beginnt die Wiedergabe automatisch. (Wenn Sie die Betriebsarttaste bei eingelegter Compact-Disc betätigen, wird auf die CD-Betriebsart umgeschaltet. Dabei leuchtet die DISC-Anzeige auf.)

2 Wahl eines gewünschten Titels

Wählen Sie mit der Taste "∨" oder "∧" einen Titel.
Betätigen Sie einmal die Taste "∧", um die Disc zu Beginn des nächsten Titels abzuspielen.
Betätigen Sie einmal die Taste "∨", um die soeben gehörte Auswahl noch einmal abspielen zu lassen. Betätigen Sie die Taste "∨" zweimal, um die Disc vom Anfang des vorausgehenden Titels abspielen zu lassen.
Drücken Sie während der CD-Wiedergabe mindestens eine halbe Sekunde lang die Taste "∨" oder "∧", um mit dem Suchlauf (vorwärts oder rückwärts) zu bebinnen.
Um die Suchlauf-Betriebsart aufzuheben, die Taste "∨" oder "∧" erneut drücken.

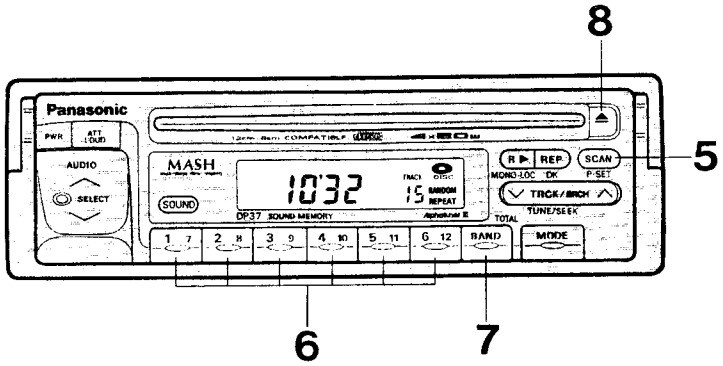
3 Wiedergabe in Zufallsfolge

- Drücken Sie die Taste "R▶", um die Titel in zufälliger Folge abspielen zu lassen. Dabei leuchtet die "RANDOM"-Anzeige auf. Die Zufallsfolge wird vom eingebauten Mikroprozessor des Geräts automatisch vorgegeben.
- Auf erneuten Tastendruck wird der Zufallsbetrieb aufgehoben.

4 Wiederholung

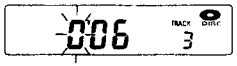
- Betätigen Sie REP-Taste, um die gegenwärtige Titelauswahl noch einmal wiederzugeben. Dabei leuchtet die "REPEAT"-Anzeige auf.
- Auf erneuten Tastendruck wird der Wiederholungsbetrieb aufgehoben.

Bedienung des Compact-Disc-Spielers (Fortsetzung)



5 Anspielen von Titeln

- Drücken Sie die SCAN-Taste. Das Anzeigefeld blinkt, und die ersten 10 Sekunden jedes Titels auf der Disc werden der Reihe nach angespielt.
- Um den Anspiel-Suchlauf zu beenden und die Wiedergabe des gegenwärtigen Titels fortzusetzen, drücken Sie diese Taste erneut.



6 Wiedergabe auf direkten Zugriff

❶ Um die Titel 1 - 6 wiederzugeben, drücken Sie die Tasten 1 - 6.
❷ Um die Titel 7 - 12 wiederzugeben, drücken Sie die Tasten 7 - 12, und halten Sie diese mindestens 1 Sekunde lang nieder.

7 Titelgesamtzahl und Anzeige der Disc-Gesamtspielzeit

Mit der TOTAL-Taste erhalten Sie eine Anzeige der Titelgesamtzahl und der Disc-Gesamtspielzeit. Die Anzeigeleuchten blinken 5 Sekunden lang, wonach die Anzeige automatisch wieder in den vorausgehenden Betriebszustand zurückkehrt.

8 Disc-Auswurf

Drücken Sie die Auswurftaste (⏏), um den CD-Betrieb abzubrechen. Die Disc wird dann leise aus dem Disc-Fach ausgefahren. (Während des Disc-Auswurfs leuchtet "ξ∪" auf.)

Hinweis: Wenn Sie die Betriebsarttaste während der CD-Wiedergabe betätigen, wird auf Tuner-Betrieb umgeschltet.

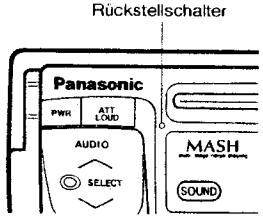
Display-Anzeigen

ANZEIGE	BESCHREIBUNG
LOAd	Leuchtet während des Disc-Ladevorgangs auf.
Ej	Leuchtet während des Disc-Auswurfs auf.

Fehlermeldungen

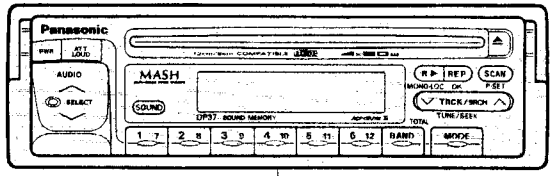
ANZEIGE	BESCHREIBUNG
E-1	Blinkt, wenn die Compact-Disc verschmutzt oder umgekehrt eingelegt ist. Nach 5 Sekunden Blinken wird die Disc automatisch ausgeworfen.
E-2	Blinkt, wenn die Compact-Disc einen Kratzer aufweist. Nach 5 Sekunden Blinken wird die Disc automatisch ausgeworfen.
E-3	Leuchtet auf, wenn das Gerät aus irgendeinem Grund den Betrieb beendet. Drücken Sie die Auswurftaste "⏏" oder den Rückstellschalter an diesem Gerät. Falls die Disc nicht ausgeworfen wird und "E-3" erneut erscheint, könnte eine Störung vorliegen.

Rückstellschalter
Betätigen Sie diesen Schalter, wenn ein ungewöhnliches Geräusch zu hören ist oder irgendeine der Disc-Betriebstasten nicht normal funktioniert. Drücken Sie diesen Schalter mit einem spitzen Gegenstand nieder.



Diebstahlschutz

Dieses tragbare Gerät vereitelt der zunehmenden Zahl von Autoradiodieben den Zugriff. Wenn Sie das Auto unbewacht parken wollen, brauchen Sie Ihr Panasonic-Autoradio nur herauszunehmen.



TRAGEGRIFF:
Das Gerät am Tragegriff auf seiner Halterung herausziehen und beim Verlassen des Fahrzeugs mitnehmen. VOR DEM HERAUSZIEHEN DES GERÄTS AM HANDGRIFF UNBEDINGT DIE STROMVERSORGUNG AUSSCHALTEN.

Herausnehmen und Einsetzen des Geräts

Herausnehmen:
1. Die Stromversorgung ausschalten.
2. Zum Hockklappen des Tragegriffes seinen Vorsprung drücken. (Abb. 1. ❶, ❷)
3. Das Gerät am Tragegriff aus seiner Halterung ziehen (Abb. 1, ❸)

Einsetzen:
Das Gerät in seine Halterung einsetzen und bis zum Anschlag hineinschieben.
Eine Sperre sichert das Gerät automatisch in seiner Lage. Beim Einrasten ist ein deutliches Klickgeräusch zu hören.

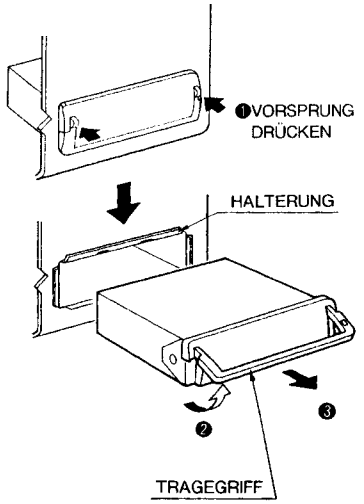


Abb.1

Hinweise:
1. Vor dem Entfernen des Gerätes unbedingt die Stromversorgung ausschalten.
2. Der Betrieb des Gerätes bei freigegebener Sperre ist gefährlich. Sicherstellen, daß der Tragegriff nach unten geklappt und das Gerät ganz bis zum Anschlag in die Halterung eingeschoben ist.
3. Nach mehreren Betriebsstunden wird das Gerät warm, besonders auf seiner rechten Seite. Bitte beachten Sie dies stets und verhalten Sie sich entsprechend.
4. Das Gerät ist nicht wasserdicht. Daher darf es auf keinen Fall mit Wasser in Berührung kommen oder extremer Feuchtigkeit ausgesetzt werden.
5. Das Gerät beim Transport am Tragegriff nicht anschlagen, hin- und herschwingen oder fallen lassen.
6. Im Interesse Ihrer eigenen Sicherheit sollten Sie während der Fahrt keine Speicheroperationen am Gerät ausführen und das Gerät auf keinen Fall aus seiner Halterung herausnehmen.

Einbau

Hinweise:
- Vor dem Einbau des Geräts mit Antenne und Lautsprechern überprüfen, ob der Tuner einwandfrei funktioniert.
- Das Massekabel vom Minuspol (−) der Batterie abklemmen.

Einbau in das Armaturenbrett

Einbauöffnung

Falls im Armaturenbrett eine entsprechende Einbauöffnung wie in Abb. 2 gezeigt vorhanden ist, läßt sich das Gerät in das Armaturenbrett einbauen. Für einen solchen Einbau sollte das Armaturenbrett eine Dicke von 4,5 bis 6 mm haben.

Herausnehmen des Geräts aus der Schnellwechselhalterung

Bei Lieferung ist das Gerät in die Schnellwechselhalterung eingesetzt und verriegelt. Das Gerät läßt sich folgendermaßen aus der Halterung herausnehmen:

1. Die Stromversorgung ausschalten.
2. Die Sperre durch Drücken entriegeln, damit das Gerät freigegeben wird.
3. Den Tragegriff nach oben klappen. (Abb. 3, ❶).
4. Das Gerät am Tragegriff aus seiner Halterung ziehen. (Abb. 3, ❷).

Einbau

1. Die Schnellwechselhalterung in das Armaturenbrett einsetzen und die Befestigungsfedern mit einem Schraubendreher wie in Abb. 3 gezeigt entsprechend biegen.
2. Vor der endgültigen Montage der Schnellwechselhalterung unbedingt die Angaben unter "Sichere Befestigung der Schnellwechselhalterung an ihrer Rückseite" auf der nächsten Seite durchlesen und prüfen, ob die Halterungsrückseite fest mit der Fahrzeugkarosserie verbunden ist.
   Außerdem die elektrischen Verbindungen anhand der folgenden Einbauanweisungen überprüfen. Die Schnellwechselhalterung wie in Abb. 3 gezeigt am Armaturenbrett befestigen.
3. Nun das Gerät in die Halterung einschieben.
4. Nach dem Einbau das Massekabel wieder an den Minuspol (−) der Batterie anschließen.

Einbau-Teileliste

Abb.	Bezeichnung	Anzahl
①	Schnellwechselhalterung	1
②	Einbauleiste	1
③	Sechskantschraube (5mmϕ x 25mm)	1
④	Sechskantmutter (5mmϕ)	2
⑤	Federscheibe (5mmϕ)	2
⑥	Unterlegscheibe (5mmϕ)	2
⑦	Verzahnte Sicherungsscheibe (5mmϕ)	1
⑧	Befestigungsschraube	1

Abb. 2

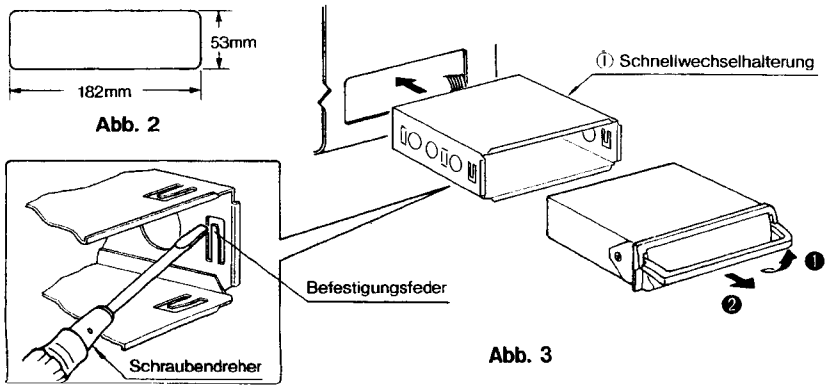


Abb. 3

Einbau (Fortsetzung)

Sichere Befestigung der Schnellwechselhalterung an ihrer Rückseite:

■ Verwendung der Einbauleiste (Siehe Abb. 4.)

Das eine Ende der Einbauleiste mit der Rückseite der Schnellwechselhalterung und das andere Ende an der Brandschutzwand des Fahrzeugs oder einer anderen metallischen Karosseriestelle anbringen.

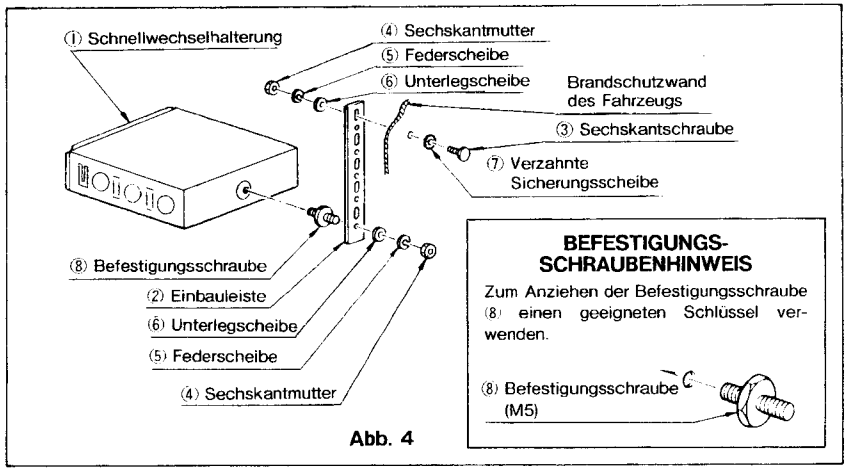


Abb. 4

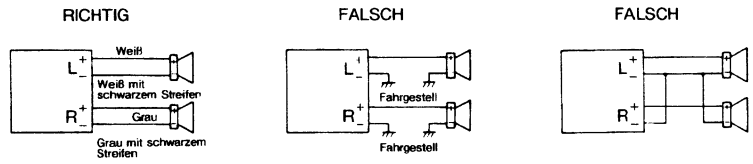
Achtung:
- Bei eingerasteter Sperre das Gerät auf keinen Fall am Handgriff aus der Halterung herausziehen.

Anschluß der Lautsprecher

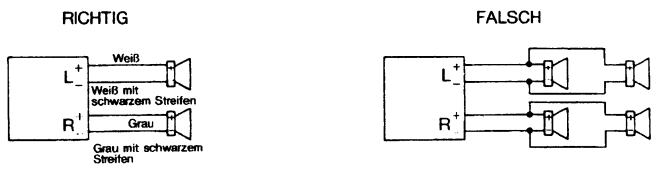
Vorsichtsmaßregeln

1. Nur ungeerdete Lautsprecher verwenden.
2. Die mit diesem Gerät verwendeten Lautsprecher sollen eine Musik-Belastbarkeit von über 20 W besitzen. Bei Verwendung eines Sonderzubehör-Verstärkers soll die Belastbarkeit der Lautsprecher der Höchstausgangsleistung des Verstärkers angepaßt sein. Lautsprecher mit zu geringer Belastbarkeit können beschädigt werden.
3. Die Impedanz der Lautsprecher soll 4 - 8 Ohm betragen. Eine zu große oder zu kleine Impedanz ist mit Leistungseinbußen verbunden und kann zu einer Beschädigung der Lautsprecher oder dieses Geräts führen.
4. Kein 3-Kabel-Lautsprechersystem mit einer gemeinsamen Erdungsleitung verwenden. Das Lautsprecherkabel niemals an der Fahrzeugkarosserie anschließen. Dieses Gerät ist mit einer BTCL-Schaltung ausgestattet, so daß jeder Lautsprecher getrennt mit Parallelkabeln mit Vinylisolierung anzuschließen ist.
5. Lautsprecherkabel und Leistungsverstärker sind von Antenne und Antennenverlängerungskabel entfernt zu halten (etwa 30 cm auseinander).
6. Das folgende Anschlußschema genau beachten. Anderenfalls können Gerät und Lautsprecher beschädigt werden.

- **Gerät wird beschädigt, wenn Lautsprecher (vorne, hinten) nicht richtig angeschlossen sind.**



- **Nicht mehr als einen Lautsprecher an einen Lautsprecherleitungssatz anschließen.**



Sicherung

Als Ersatz für eine durchgebrannte Sicherung unbedingt eine Sicherung mit dem vorgeschriebenen Nennwert (3,15 A, 10 A) verwenden. Durch den Gebrauch von Sicherungen mit höheren Nennwerten, von Sicherungsersatzteilen oder durch den Anschluß ohne Gebrauch einer Sicherung kann ein Brand oder Geräteschaden verursacht werden. Falls die Austauschsicherung ebenfalls durchbrennt, wenden Sie sich bitte an die nächste Panasonic-Kundendienststelle.

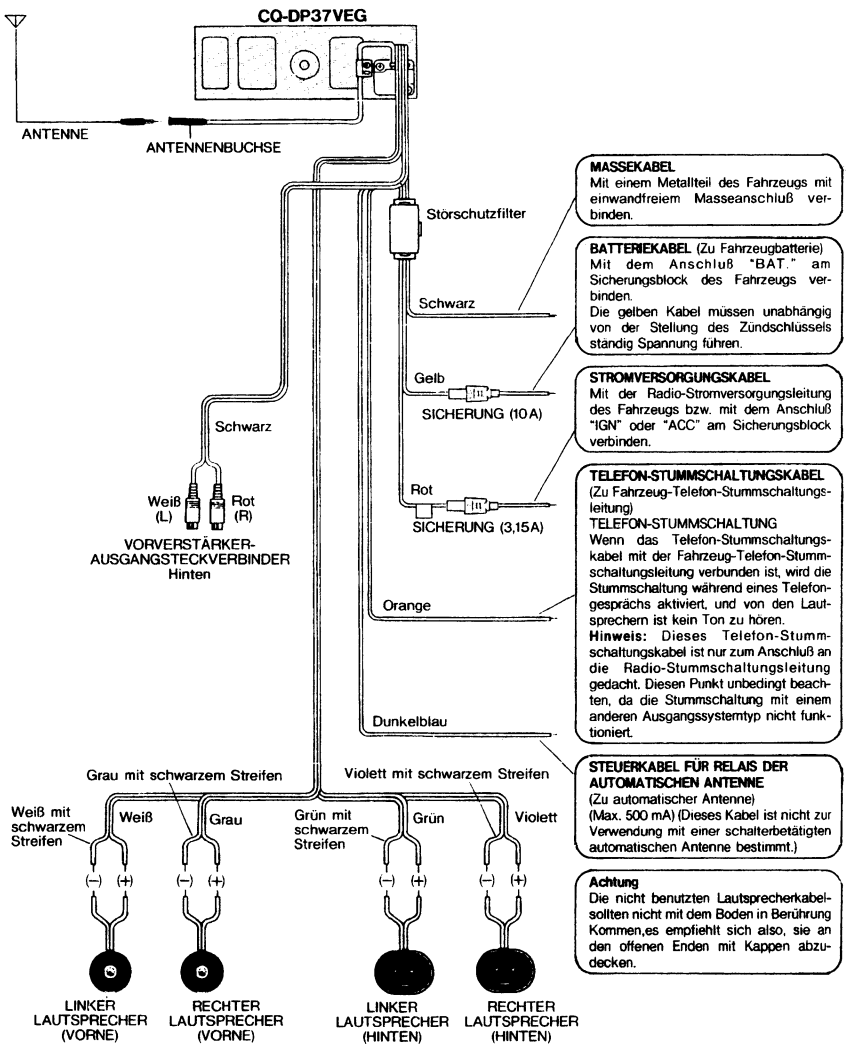
Pflege

Zur Reinigung das Äußere des Geräts mit einem weichen Tuch abwischen. Auf keinen Fall Benzin, Verdünner oder irgendein anderes Lösemittel verwenden.

Elektrischer Anschluß

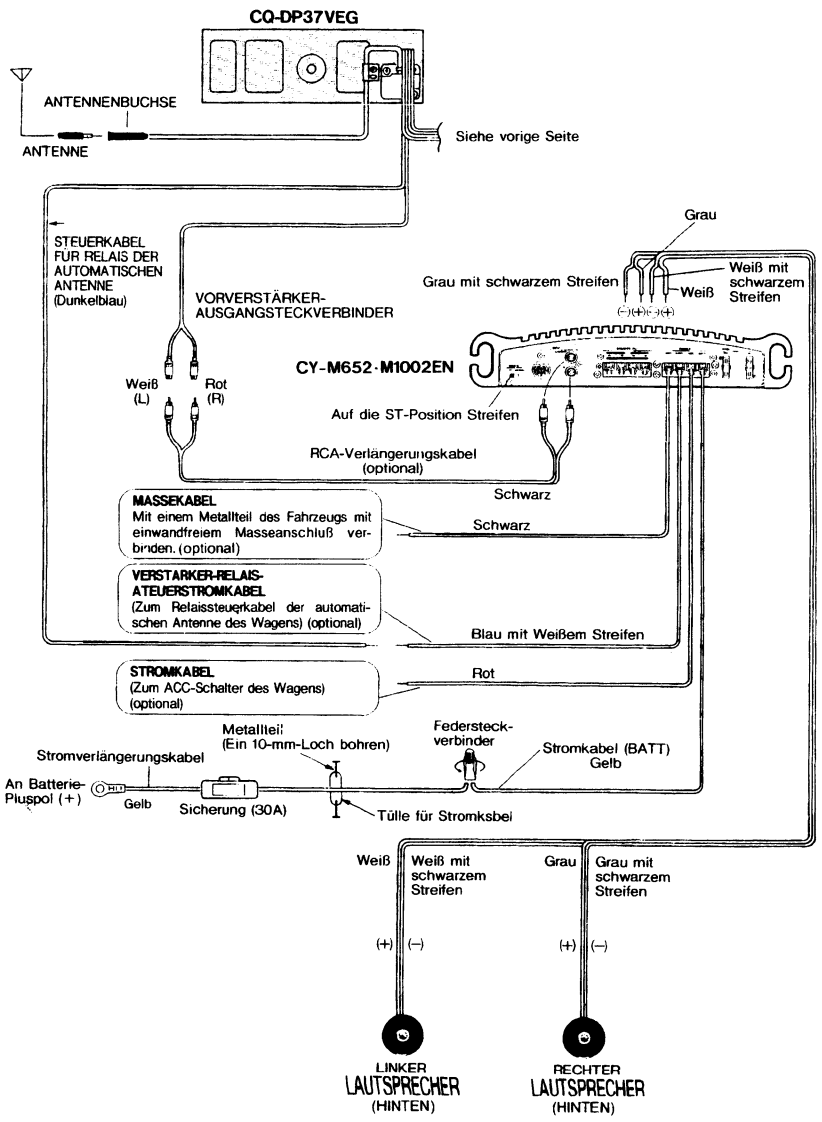
Achtung:

- Unbedingt das folgende Anschlußschema einhalten, um eine Beschädigung des Geräts zu vermeiden.
- Freiliegende Kabel unbedingt isolieren, damit kein Kurzschluß zwischen blanken Leitern und der Fahrzeugkarosserie entstehen kann. Sämtliche Kabel zu Bündeln zusammenfassen und darauf achten, daß die Kabelenden keinen Kontakt mit Metallteilen haben.


CQ-DP37VEG
ANTENNE
ANTENNENBUCHSE
Störschutzfilter
Schwarz
Gelb
SICHERUNG (10A)
Rot
SICHERUNG (3,15A)
Schwarz
Weiß (L)
Rot (R)
VORVERSTÄRKER-AUSGANGSTECKVERBINDER Hinten
Orange
Dunkelblau
Grau mit schwarzem Streifen
Violett mit schwarzem Streifen
Weiß mit schwarzem Streifen
Weiß
Grau
Grün mit schwarzem Streifen
Grün
Violett
(–) (+)
LINKER LAUTSPRECHER (VORNE)
RECHTER LAUTSPRECHER (VORNE)
LINKER LAUTSPRECHER (HINTEN)
RECHTER LAUTSPRECHER (HINTEN)
MASSEKABEL
Mit einem Metallteil des Fahrzeugs mit einwandfreiem Masseanschluß verbinden.
BATTERIEKABEL (Zu Fahrzeugbatterie)
Mit dem Anschluß "BAT." am Sicherungsblock des Fahrzeugs verbinden.
Die gelben Kabel müssen unabhängig von der Stellung des Zündschlüssels ständig Spannung führen.
STROMVERSORGUNGSKABEL
Mit der Radio-Stromversorgungsleitung des Fahrzeugs bzw. mit dem Anschluß "IGN" oder "ACC" am Sicherungsblock verbinden.
TELEFON-STUMMSCHALTUNGSKABEL
(Zu Fahrzeug-Telefon-Stummschaltungsleitung)
TELEFON-STUMMSCHALTUNG
Wenn das Telefon-Stummschaltungskabel mit der Fahrzeug-Telefon-Stummschaltungsleitung verbunden ist, wird die Stummschaltung während eines Telefongesprächs aktiviert, und von den Lautsprechern ist kein Ton zu hören.
Hinweis: Dieses Telefon-Stummschaltungskabel ist nur zum Anschluß an die Radio-Stummschaltungsleitung gedacht. Diesen Punkt unbedingt beachten, da die Stummschaltung mit einem anderen Ausgangssystemtyp nicht funktioniert.
STEUERKABEL FÜR RELAIS DER AUTOMATISCHEN ANTENNE
(Zu automatischer Antenne)
(Max. 500 mA) (Dieses Kabel ist nicht zur Verwendung mit einer schalterbetätigten automatischen Antenne bestimmt.)
Achtung
Die nicht benutzten Lautsprecherkabel sollten nicht mit dem Boden in Berührung Kommen,es empfiehlt sich also, sie an den offenen Enden mit Kappen abzudecken.

Elektrischer Anschluß (Fortsetzung)

In Verbindung mit einem 2-Kanal-Bruckenleistungsverstarker CY-M652EN/M1002EN (Optional)



Hinweise über Compact-Discs

VERWENDEN SIE NUR SOLCHE COMPACT-DISCS, DIE DAS RECHTS DARGESTELLTE ETIKETT AUFWEISEN

- Staub, Schmutz, Kratzer und Disc-Verformung werden Betriebsstörungen verursachen. Bitte handhaben Sie Compact-Discs sorgfältig.
- Zerkratzen Sie Compact-Discs nicht, und kleben Sie keine Etiketten darauf.
- Biegen Sie Compact-Discs nicht.
- Compact-Discs sollten zum Schutz gegen Beschädigung immer in ihrer Plastikhülle aufbewahrt werden, solange sie nicht benutzt werden.
- An den folgenden Orten sollten Compact-Discs nicht herumliegen:
  1. Unter direkter Sonneneinstrahlung
  2. Schmutzige, staubreiche und feuchte Orte
  3. In der Nähe einer Fahrzeugheizung
  4. Auf den Sitzen und dem Armaturenbrett

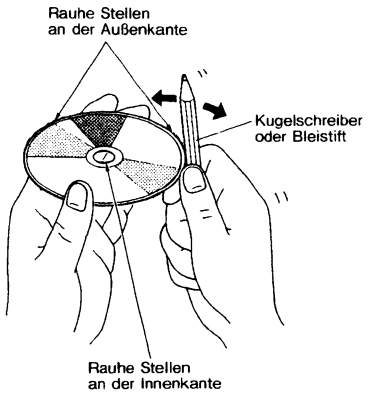
Etikett
Etikettseite nach oben
Nicht die Unterseite der Disc berühren.
Nicht biegen.
Die Disc von der Mitte her nach außen sauberwischen.

Reinigen von Compact-Discs

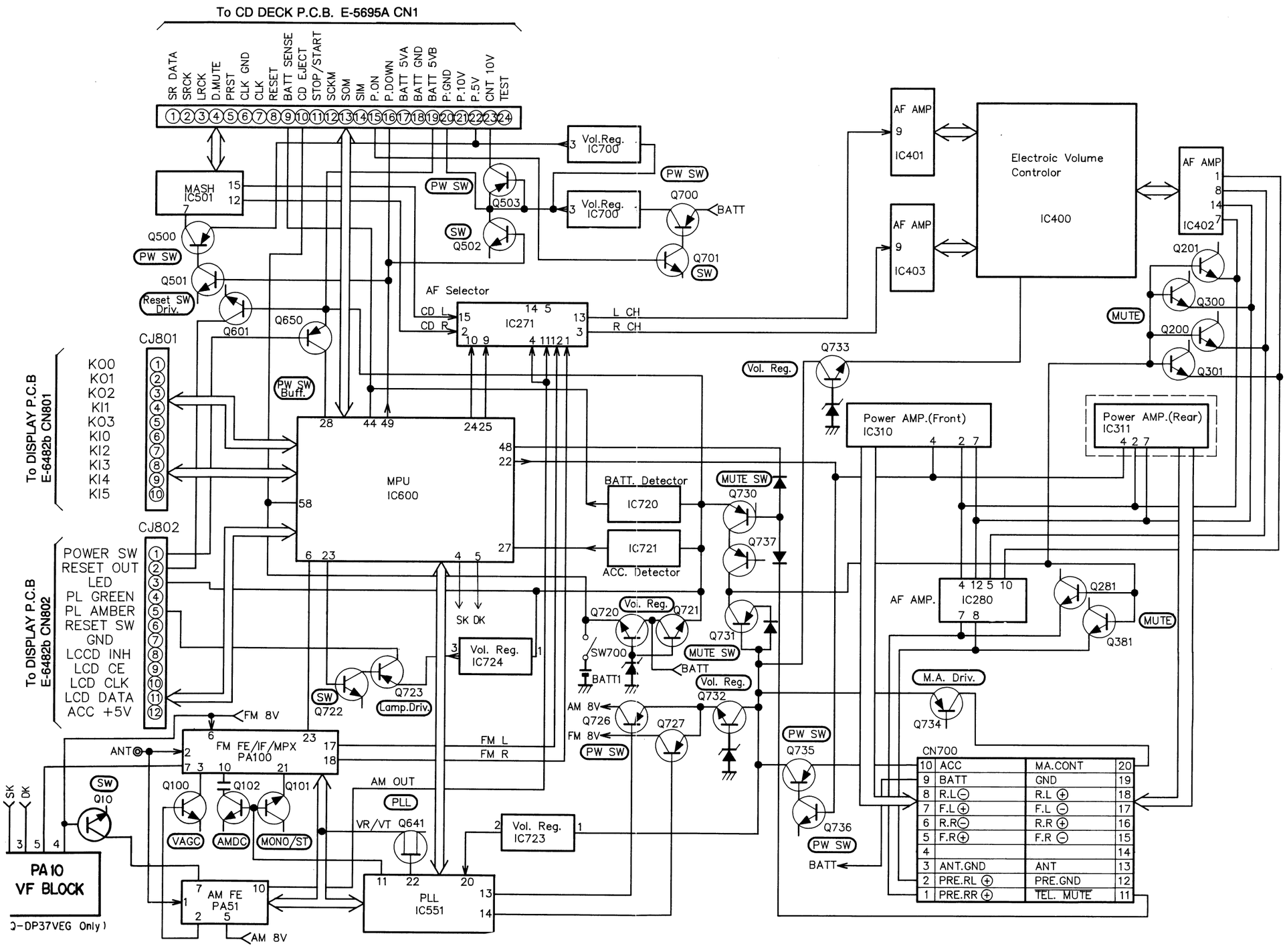
Wischen Sie die Oberfläche mit einem trockenen, weichen Tuch ab. Falls die CD stark verschmutzt ist, sollten Sie ein leicht mit Isopropylalkohol befeuchtetes, weiches Tuch verwenden. Benutzen Sie niemals solche Flüssigkeiten wie Benzin, Farbverdünner oder Schallplattenreiniger, da die Disc-Oberfläche sonst leicht beschädigt werden könnte.

Vorsichtsmaßnahmen bei neuen Compact-Discs

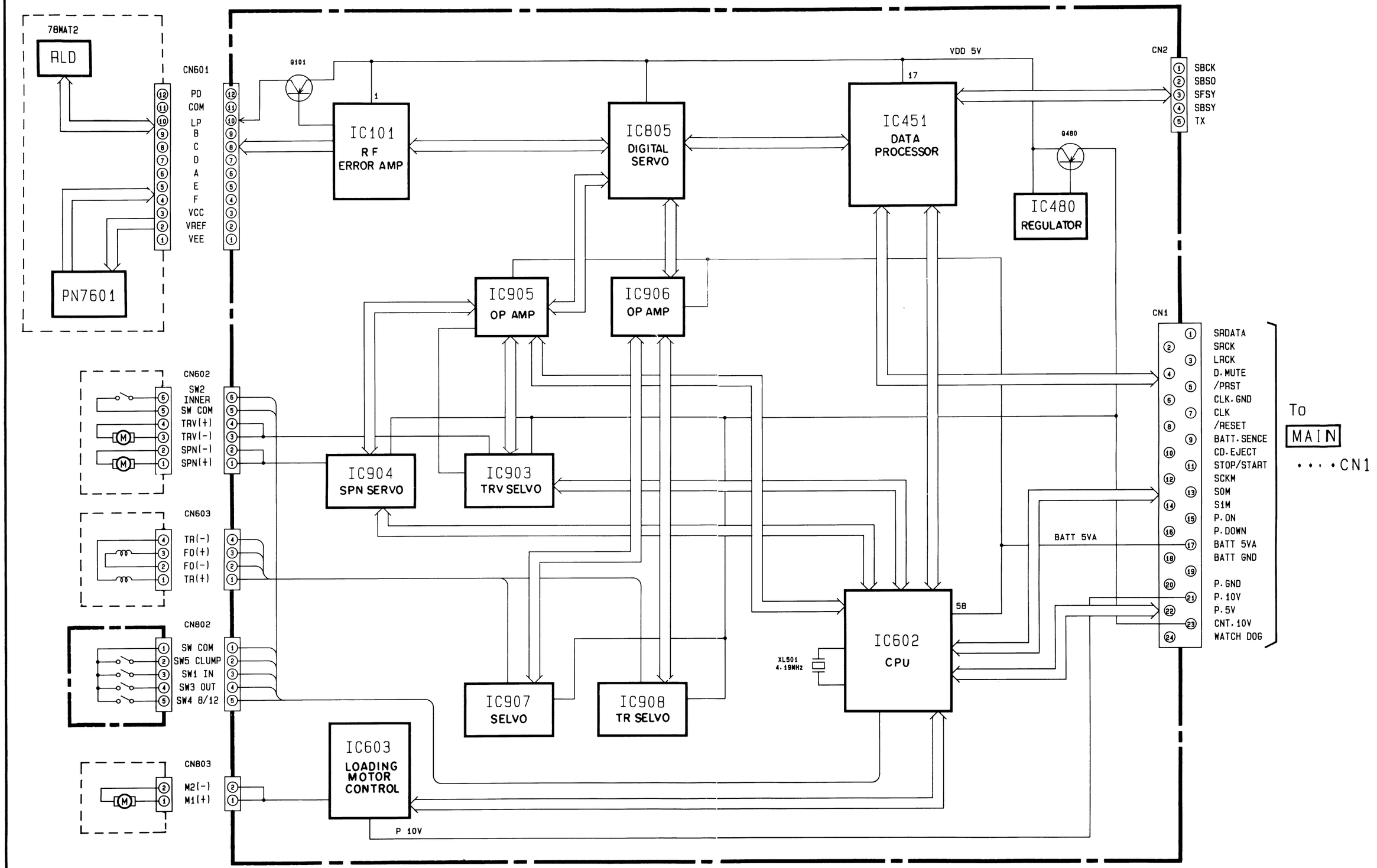
Eine neue Compact-Disc hat an der inneren und der äußeren Kreiskante eventuell rauhe Stellen. Wenn solch eine CD mit rauher Kante verwendet wird, ist keine präzise Positionierung möglich, und der CD-Spieler kann die Compact-Disc nicht abspielen. Entfernen Sie solche unregelmäßigen Stellen mit einem Kugelschreiber oder Bleistift, wie rechts dargestellt. Pressen Sie einfach die Seite des Schreibstifts gegen die äußere und innere Kante der Compact-Disc.



BLOCK DIAGRAM MODELS CQ-DP37VEG/LEE (MAIN BLOCK)

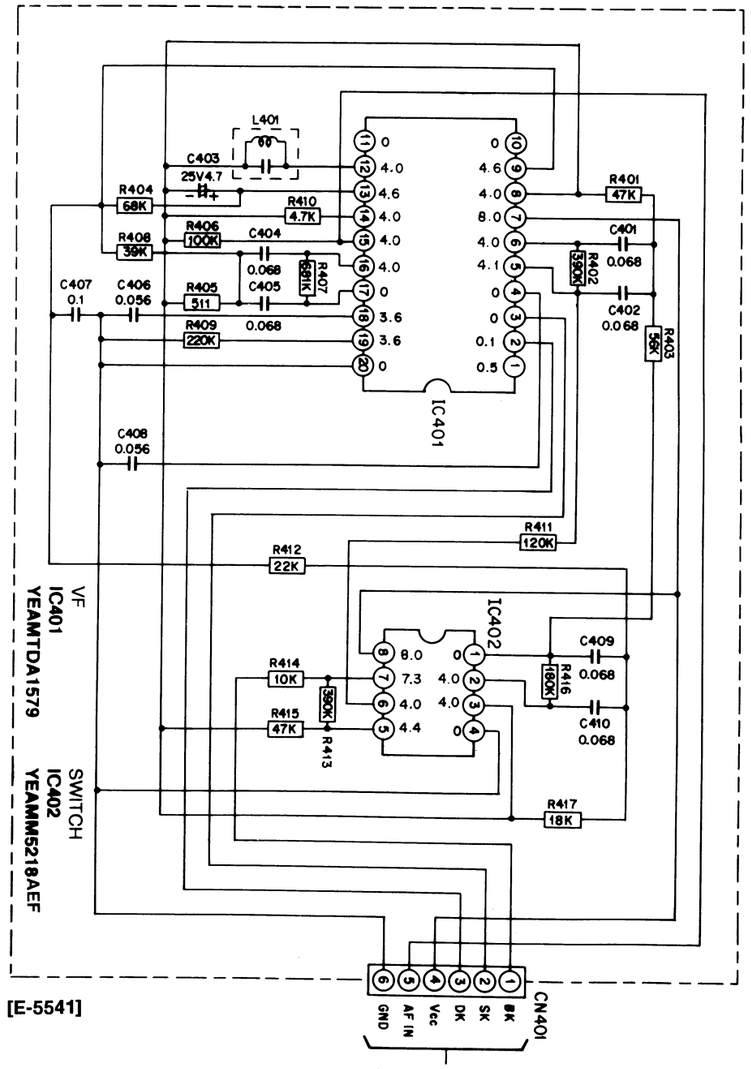


BLOCK DIAGRAM MODELS CQ-DP37VEG/LEE (CD DECK BLOCK)

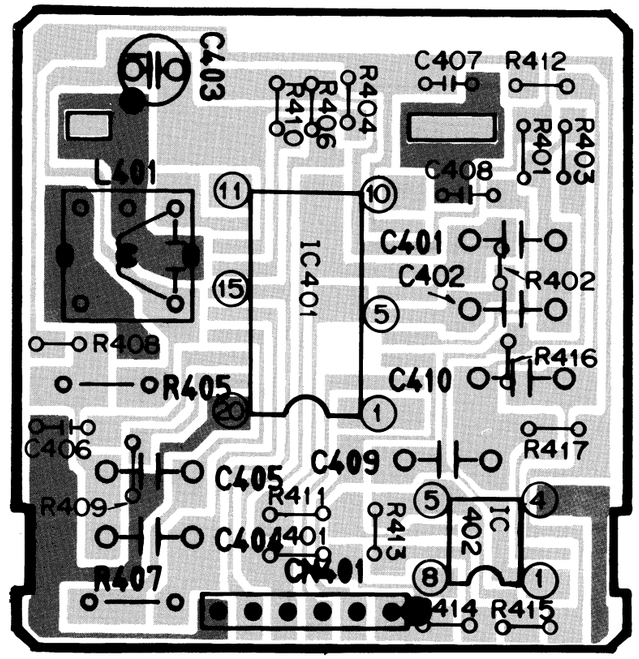


CD Player /AM / FM / Receiver

SCHEMATIC DIAGRAM / SCHALTBILT MODEL CQ-DP37VEG (VF BLOCK)



WIRING DIAGRAM / VERDHATUNG MODEL CQ-DP37VEG (VF BLOCK)



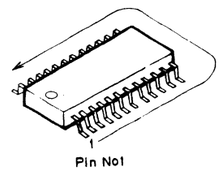
IC401	
1	0.5V
2	0.1V
3	0V
4	0V
5	4.1V
6	4.0V
7	8.0V
8	4.0V
9	4.6V
10	0V
11	0V
12	4.0V
13	4.6V
14	4.0V
15	4.0V
16	4.0V
17	0V
18	3.6V
19	3.6V
20	0V

IC401

IC402

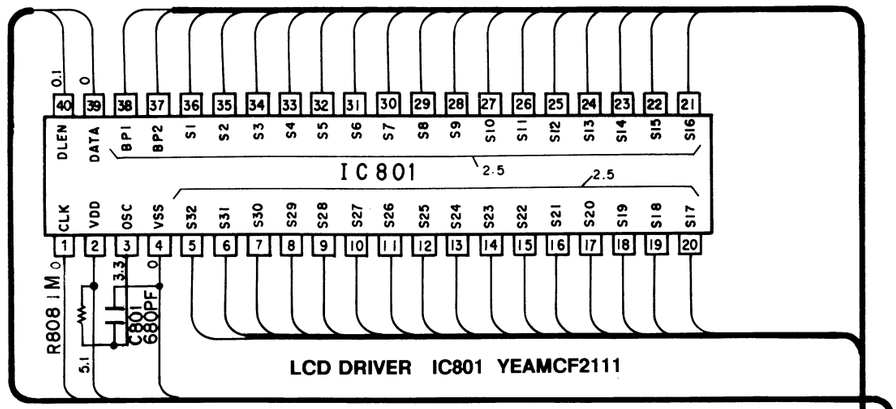
IC402	
1	0V
2	4.0V
3	4.0V
4	0V
5	4.4V
6	4.0V
7	7.3V
8	8.0V

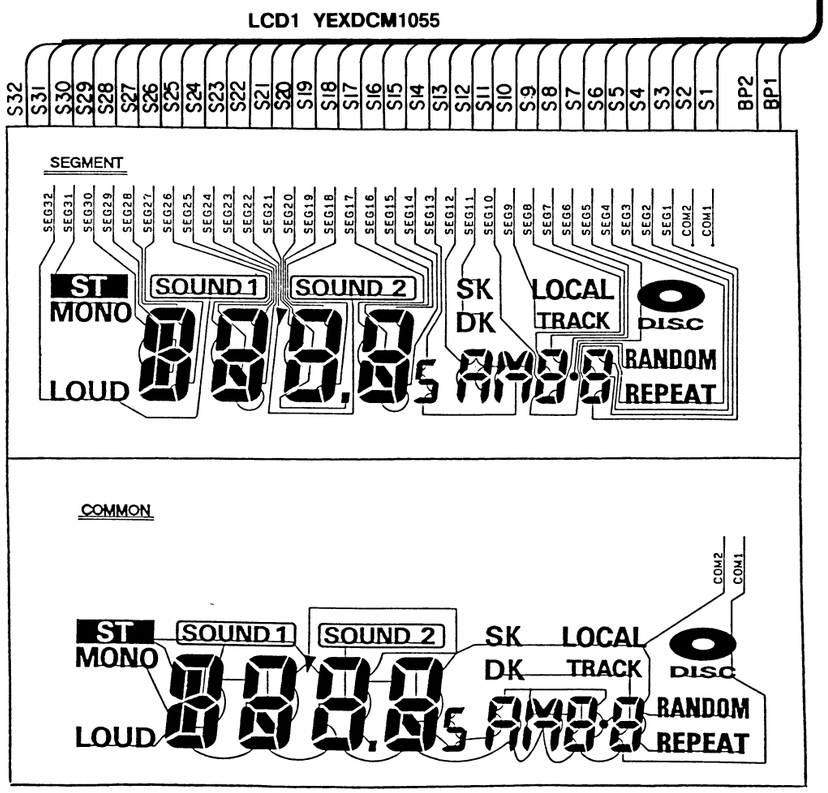
ICs



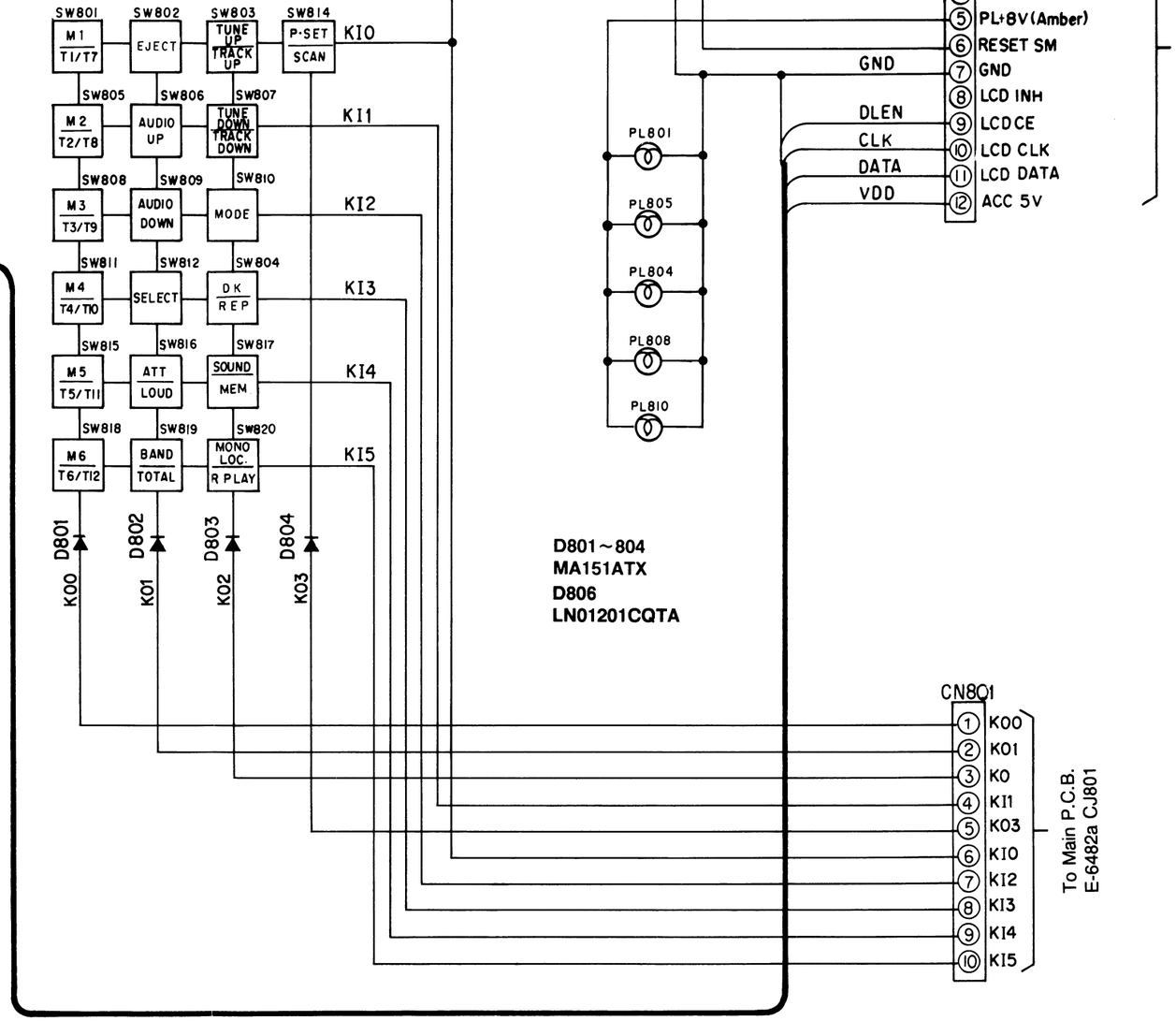
IC401	20Pin
IC402	8Pin

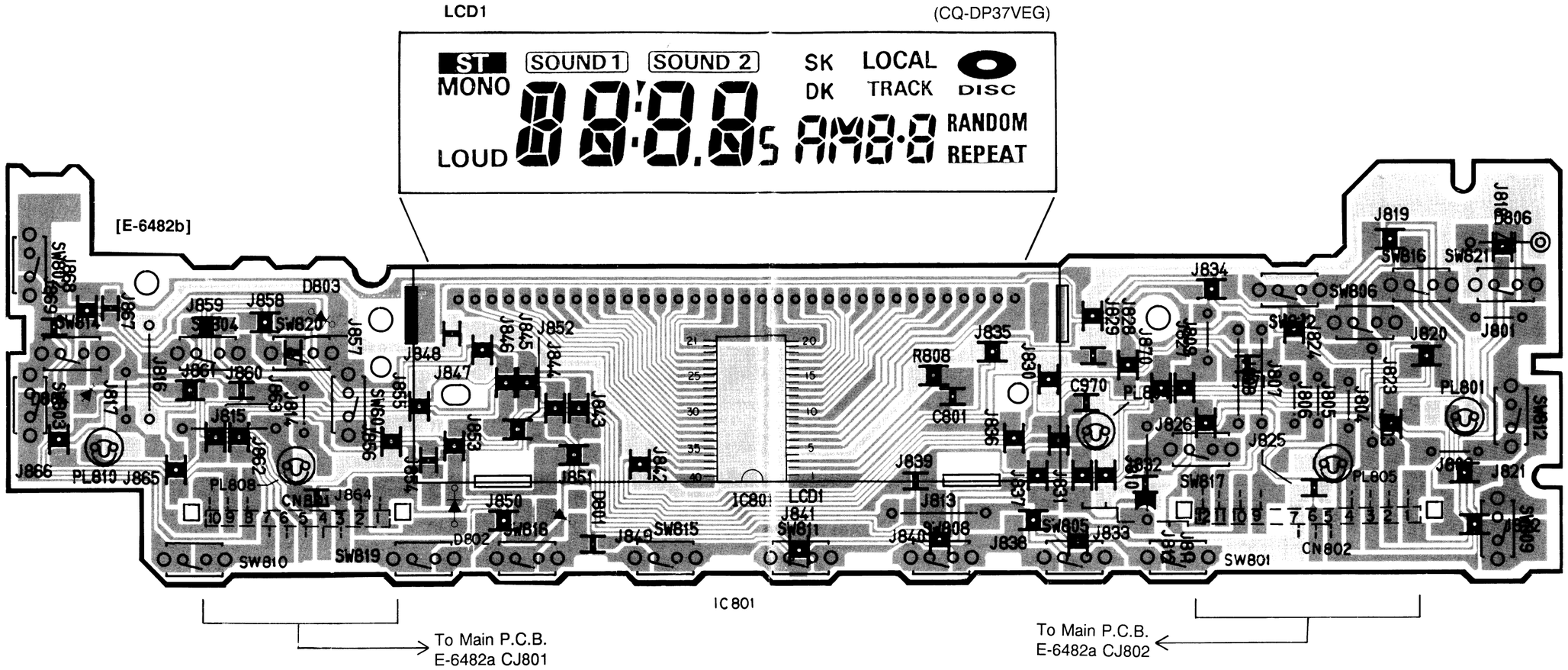
SCHEMATIC DIAGRAM / SCHALTBILT MODELS CQ-DP37VEG/LEE (DISPLAY BLOCK)





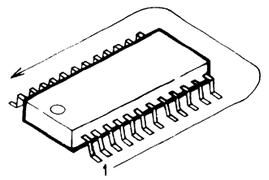
(CQ-DP37VEG)





SW801 : Preset M1 / Track 1, 7
SW802 : Eject / ILL
SW803 : Tune Up / Track Up
SW804 : Repeat Track
SW805 : Preset M2 / Track 2, 8
SW806 : Audio Up
SW807 : Tune Down / Track Down
SW808 : Preset M3 / Track 3, 9
SW809 : Audio Down
SW810 : Mode
SW811 : Preset M4 / Track 4, 10
SW812 : Select
SW814 : P.SET / Scan
SW815 : Preset M5 / Track 5, 11
SW816 : ATT / Loud
SW817 : Sound / MEM.
SW818 : Preset M6 / Track 6, 12
SW819 : Band / Total
SW820 : MONO / LOC. / R. Play
SW821 : Power Switch
SW822 : Reset Switch

LSI



IC801	40Pin

SCHEMATIC DIAGRAM / SCHALTBILT MODELS CQ-DP37VEG/LEE (MAIN BLOCK)

Notes1:

- Voltage measurements are with respect to ground, with a digital voltmeter, with controls set for normal operation, no signal applied, 14.4V DC power supply.
- Exact value determined by production process. This schematic diagram is the latest at the time of printing and subject to change without notice. Replace same value as original parts.
- Important safety notice: Components identified by ⚠ mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.

Notes2 ⇨ : Audio Signal

➡ : DC Power Supply

To CD DECK P.C.B. E-5695A CN1

CN500 (1) SR DATA (2) SRCK (3) LRCK (4) MUTE (5) /PRST (6) CLK GND (7) CLK (8) /RESET (9) BATT SENSER (10) CD EJECT (11) STOP/START (12) SCKN (13) SON (14) SIN (15) P ON (16) P DOWN (17) BATT 5VA (18) BATT GND (19) BATT 5VB (20) P GND (21) P 10V (22) P 5V (23) CNT 10V (24) TEST

POWER SWITCH
Q502 YEANDTC144ST
Q503 YEAN2SA1244

5V
10V
P.ON

MASH
IC501 MN6475B
Q500 YEANBP1F3PT
Q501 YEANDTC144ST

IC501

A.GND
P.GND

CD.R
CD.L

D601 MA151ATX

To DISPLAY P.C.B. E-6482b CN801

To DISPLAY P.C.B. E-6482b CN802

MPU
IC600
YEAM75112756

NOTE:
Connecting to ground for CQ-DP37LEE

ACC +5V
ACC B+
PA100

SWITCH
Q601 YEANC144EKTX

D51 YEADRD56JS3T

AM FE **PA51 YEAU03SKM14**

AM 8V
TUNER GND
AM IF

FM FE/IF/MPX
PA100 YEP0PTY326A0

LOC
Q100 YEANC144EKTX

FM0
Q101 2SD1030TX

PLL
Q641 YEAN2SK583
D641 MA4100LM

ANALOG SWITCH
IC271 YEAMPD4052T2

IC271

D371 MA165

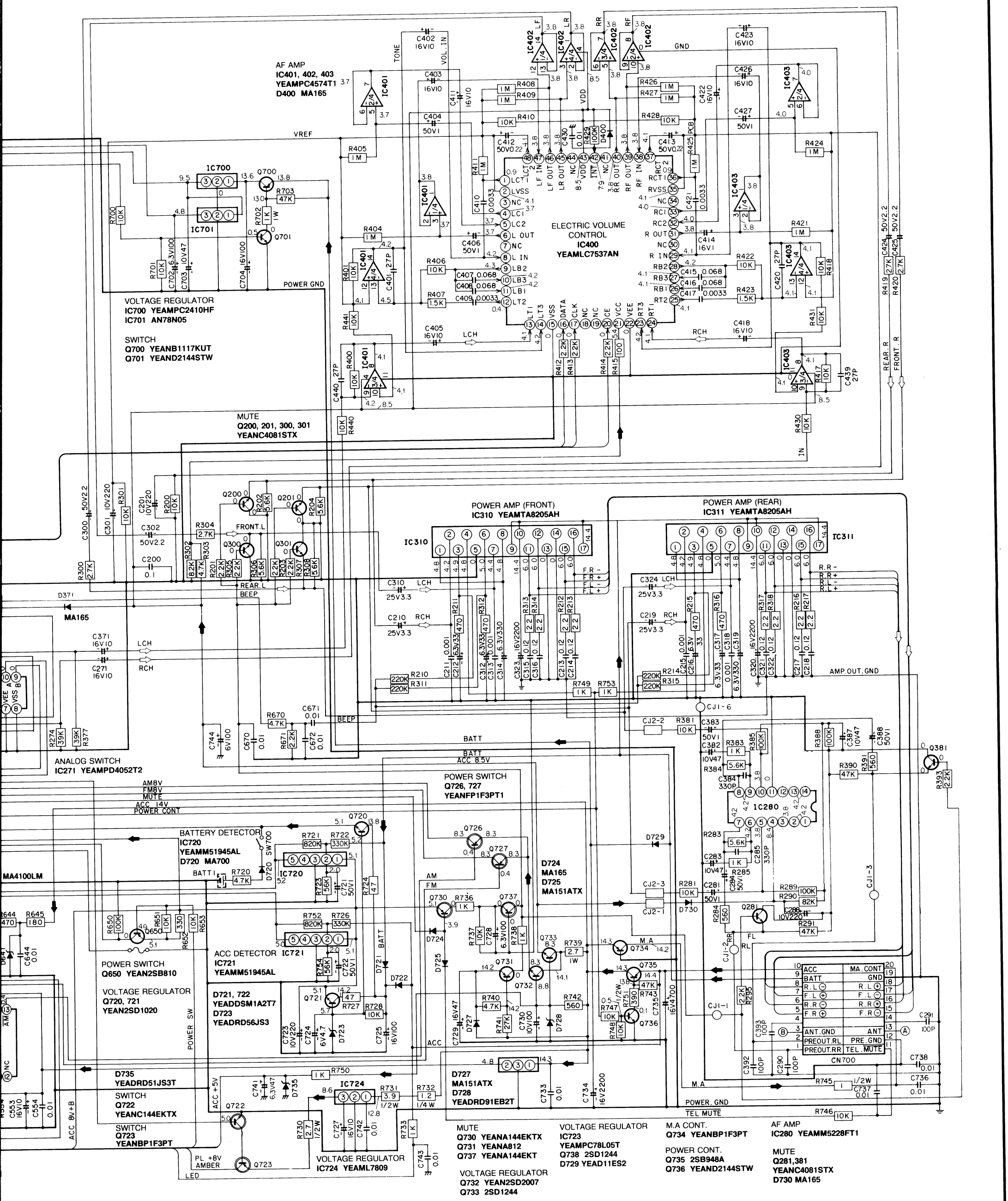
PLL **IC551 YEAMLC7218M**

IC551

CQ-DP37VEG Only

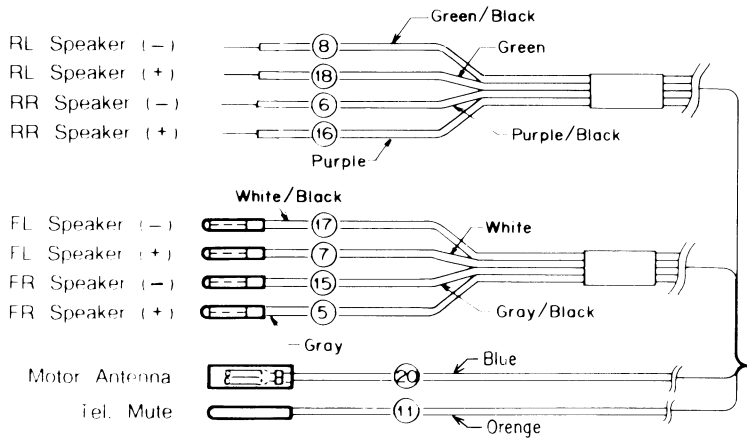
PA10 YEP0PT5541B0
Q10 YEANC144EKTX
D10 MA165

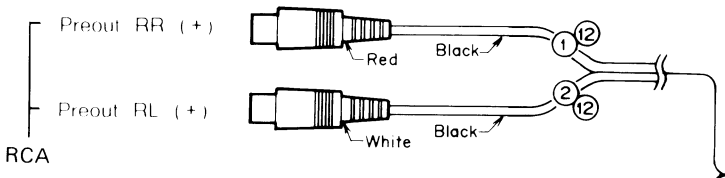
NOTE :
Do not align the AM and FM package blocks. When the package block is necessary, it will be supplied already aligned at the factory.

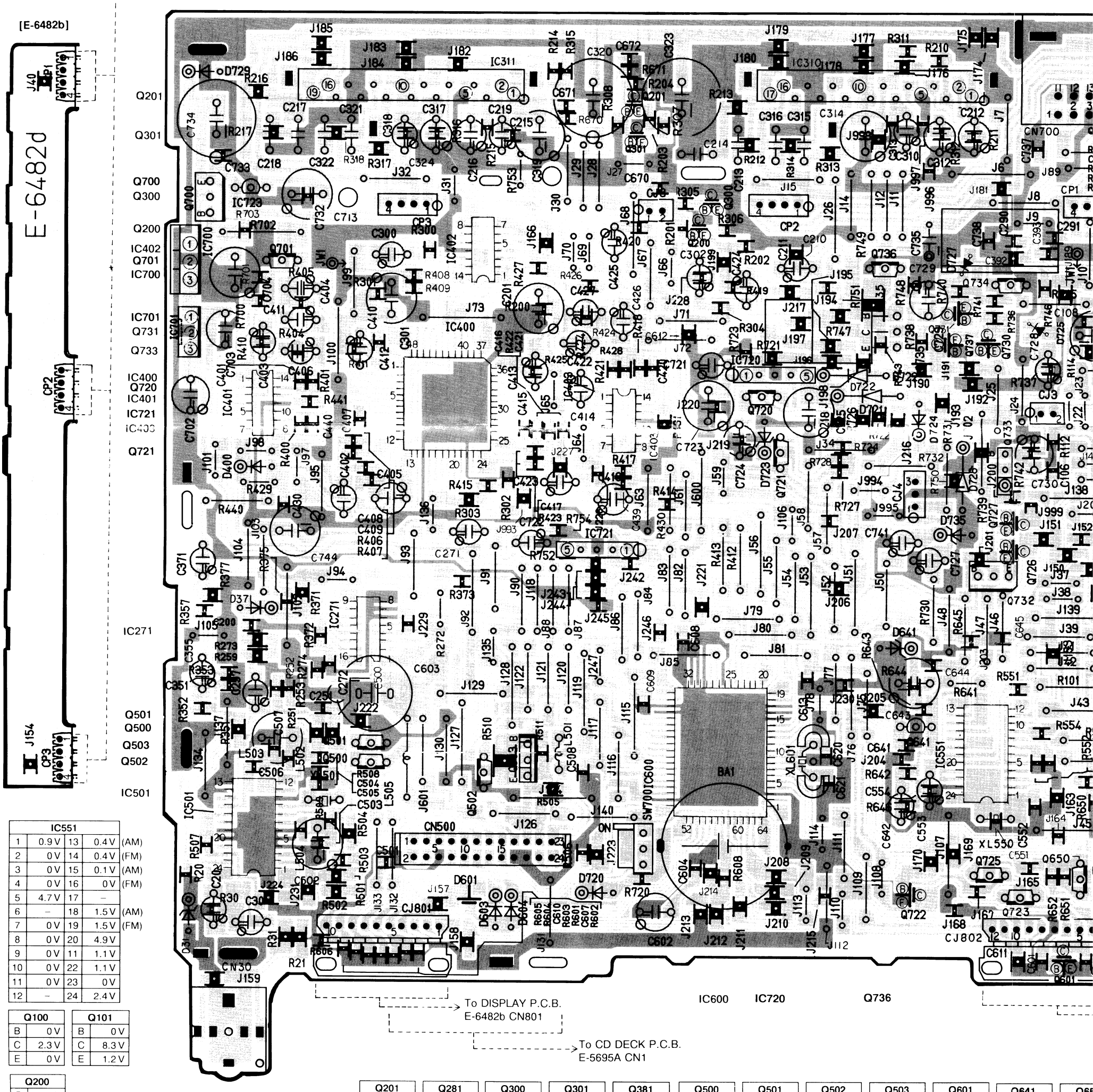


CD Player /AM / FM / Receiver

WIRING DIAGRAM / VERDHATUNG MODELS CQ-DP37VEG/LEE (MAIN BLOCK)







IC551				
1	0.9 V	13	0.4 V	(AM)
2	0 V	14	0.4 V	(FM)
3	0 V	15	0.1 V	(AM)
4	0 V	16	0 V	(FM)
5	4.7 V	17	–	
6	–	18	1.5 V	(AM)
7	0 V	19	1.5 V	(FM)
8	0 V	20	4.9 V	
9	0 V	11	1.1 V	
10	0 V	22	1.1 V	
11	0 V	23	0 V	
12	–	24	2.4 V	

Q100	
B	0 V
C	2.3 V
E	0 V

Q101	
B	0 V
C	8.3 V
E	1.2 V

Q200	
B	0 V
C	0 V
E	0 V

Q201	
B	0 V
C	0 V
E	0 V

Q281	
B	0 V
C	0 V
E	0 V

Q300	
B	0 V
C	0 V
E	0 V

Q301	
B	0 V
C	0 V
E	0 V

Q381	
B	0 V
C	0 V
E	0 V

Q500	
B	0 V
C	4.8 V
E	4.8 V

Q501	
B	5.0 V
C	0 V
E	0 V

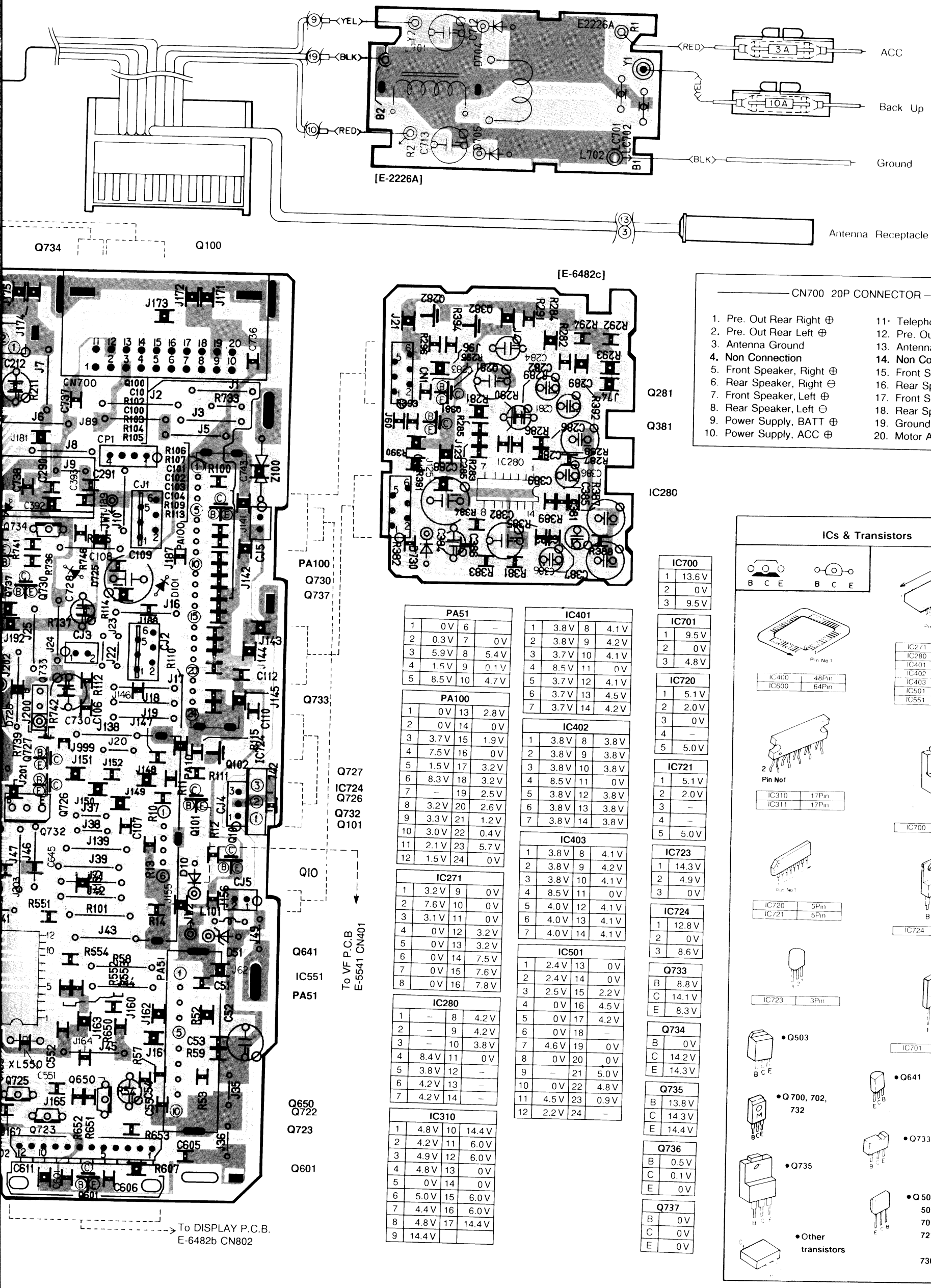
Q502	
B	5.0 V
C	0.6 V
E	0 V

Q503	
B	8.8 V
C	9.5 V
E	9.5 V

Q601	
B	5.1 V
C	0 V
E	0 V

Q641	
G	1.1 V
D	7.5 V
S	0 V

Q65	
B	4
C	
E	5



CN700 20P CONNECTOR

1. Pre. Out Rear Right ⊕
2. Pre. Out Rear Left ⊕
3. Antenna Ground
4. Non Connection
5. Front Speaker, Right ⊕
6. Rear Speaker, Right ⊖
7. Front Speaker, Left ⊕
8. Rear Speaker, Left ⊖
9. Power Supply, BATT ⊕
10. Power Supply, ACC ⊕
11. Telephone Mute
12. Pre. Out Ground
13. Antenna
14. Non Connection
15. Front Speaker, Right ⊖
16. Rear Speaker, Right ⊕
17. Front Speaker, Left ⊖
18. Rear Speaker, Left ⊕
19. Ground
20. Motor Antenna Cont.

PA51			
1	0 V	6	–
2	0.3 V	7	0 V
3	5.9 V	8	5.4 V
4	1.5 V	9	0.1 V
5	8.5 V	10	4.7 V

PA100			
1	0 V	13	2.8 V
2	0 V	14	0 V
3	3.7 V	15	1.9 V
4	7.5 V	16	0 V
5	1.5 V	17	3.2 V
6	8.3 V	18	3.2 V
7	–	19	2.5 V
8	3.2 V	20	2.6 V
9	3.3 V	21	1.2 V
10	3.0 V	22	0.4 V
11	2.1 V	23	5.7 V
12	1.5 V	24	0 V

IC271			
1	3.2 V	9	0 V
2	7.6 V	10	0 V
3	3.1 V	11	0 V
4	0 V	12	3.2 V
5	0 V	13	3.2 V
6	0 V	14	7.5 V
7	0 V	15	7.6 V
8	0 V	16	7.8 V

IC280			
1	–	8	4.2 V
2	–	9	4.2 V
3	–	10	3.8 V
4	8.4 V	11	0 V
5	3.8 V	12	–
6	4.2 V	13	–
7	4.2 V	14	–

IC310			
1	4.8 V	10	14.4 V
2	4.2 V	11	6.0 V
3	4.9 V	12	6.0 V
4	4.8 V	13	0 V
5	0 V	14	0 V
6	5.0 V	15	6.0 V
7	4.4 V	16	6.0 V
8	4.8 V	17	14.4 V
9	14.4 V		

IC401			
1	3.8 V	8	4.1 V
2	3.8 V	9	4.2 V
3	3.7 V	10	4.1 V
4	8.5 V	11	0 V
5	3.7 V	12	4.1 V
6	3.7 V	13	4.5 V
7	3.7 V	14	4.2 V

IC402			
1	3.8 V	8	3.8 V
2	3.8 V	9	3.8 V
3	3.8 V	10	3.8 V
4	8.5 V	11	0 V
5	3.8 V	12	3.8 V
6	3.8 V	13	3.8 V
7	3.8 V	14	3.8 V

IC403			
1	3.8 V	8	4.1 V
2	3.8 V	9	4.2 V
3	3.8 V	10	4.1 V
4	8.5 V	11	0 V
5	4.0 V	12	4.1 V
6	4.0 V	13	4.1 V
7	4.0 V	14	4.1 V

IC501			
1	2.4 V	13	0 V
2	2.4 V	14	0 V
3	2.5 V	15	2.2 V
4	0 V	16	4.5 V
5	0 V	17	4.2 V
6	0 V	18	–
7	4.6 V	19	0 V
8	0 V	20	0 V
9	–	21	5.0 V
10	0 V	22	4.8 V
11	4.5 V	23	0.9 V
12	2.2 V	24	–

IC700	
1	13.6 V
2	0 V
3	9.5 V

IC701	
1	9.5 V
2	0 V
3	4.8 V

IC720	
1	5.1 V
2	2.0 V
3	0 V
4	–
5	5.0 V

IC721	
1	5.1 V
2	2.0 V
3	–
4	–
5	5.0 V

IC723	
1	14.3 V
2	4.9 V
3	0 V

IC724	
1	12.8 V
2	0 V
3	8.6 V

Q733	
B	8.8 V
C	14.1 V
E	8.3 V

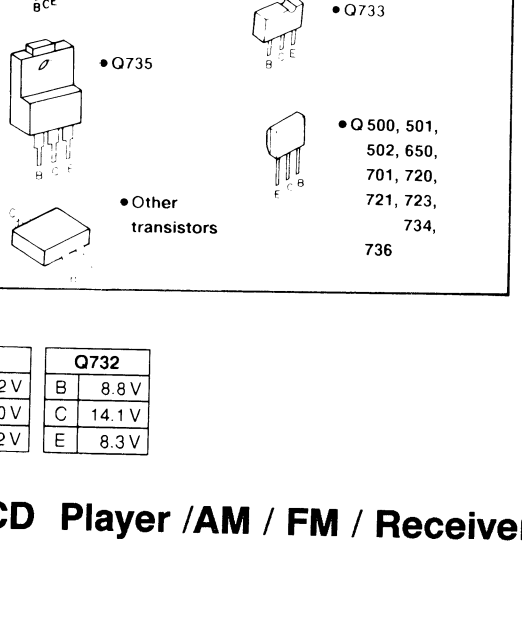
Q734	
B	0 V
C	14.2 V
E	14.3 V

Q735	
B	13.8 V
C	14.3 V
E	14.4 V

Q736	
B	0.5 V
C	0.1 V
E	0 V

Q737	
B	0 V
C	0 V
E	0 V

ICs & Transistors



Q641	
G	1.1 V
D	7.5 V
S	0 V

Q650	
B	4.9 V
C	0 V
E	5.1 V

Q700	
B	13.0 V
C	13.6 V
E	13.8 V

Q701	
B	0.5 V
C	0 V
E	0 V

Q720	
B	5.2 V
C	13.8 V
E	5.1 V

Q721	
B	5.7 V
C	14.2 V
E	5.1 V

Q722	
B	5.0 V
C	0 V
E	0 V

Q723	
B	0 V
C	7.2 V
E	7.6 V

Q726	
B	0.4 V
C	8.1 V
E	8.1 V

Q727	
B	0.4 V
C	8.3 V
E	8.3 V

Q730	
B	3.9 V
C	0 V
E	5.1 V

Q731	
B	14.2 V
C	0 V
E	14.2 V

Q732	
B	8.8 V
C	14.1 V
E	8.3 V

SCHEMATIC DIAGRAM / SCHALTBILT MODELS CQ-DP37VEG/LEE (CD DECK BLOCK)

M1:
Traverse Motor

M2:
Spindle Motor

M3:
Loading Motor

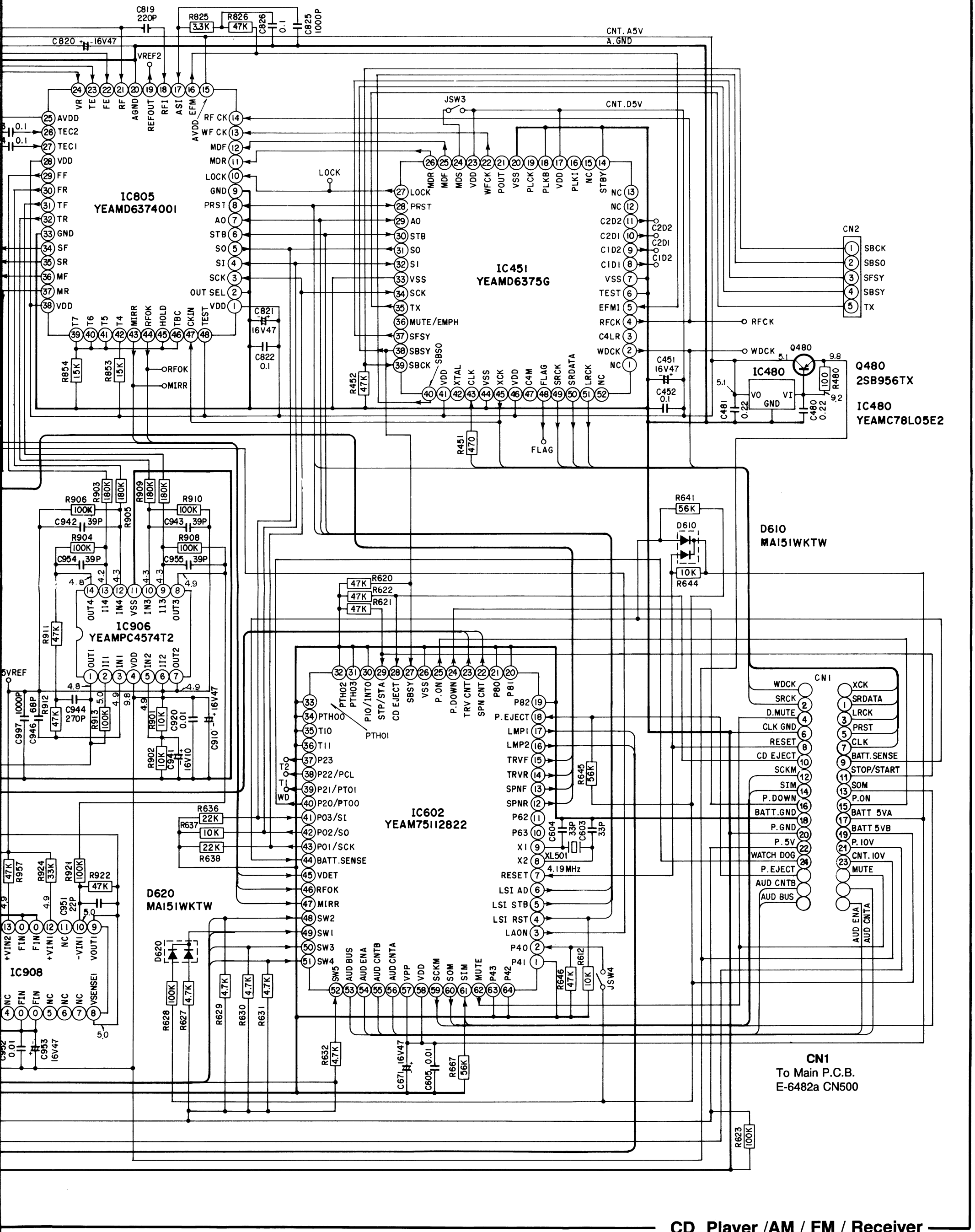
SW2 :
Inside Track Switch

SW1 :
Disc In Switch

SW3 :
Disc Out Switch

SW4 :
8 12 cm Detection Switch

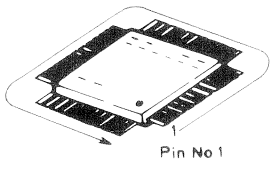
SW5 :
Clamp on/off Switch



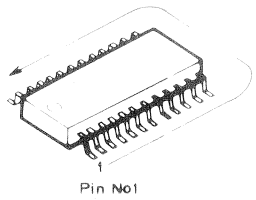
CD Player /AM / FM / Receiver

WIRING DIAGRAM / VERDHATUNG MODELS CQ-DP37VEG/LEE (CD DECK BLOCK)

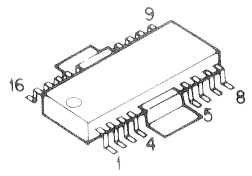
ICs & Transistors



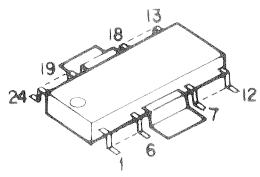
IC451	52Pin
IC602	64Pin
IC805	48Pin



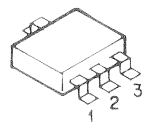
IC101	36Pin
IC903, 904	20Pin
IC905, 906	14Pin



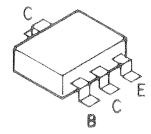
IC907, 908	16Pin



IC603	24Pin



IC480	3Pin



• Q101, 480

1	5.1V
2	2.5V
3	2.5V
4	2.6V
5	2.6V
6	0V
7	0V
8	0.8V
9	2.6V

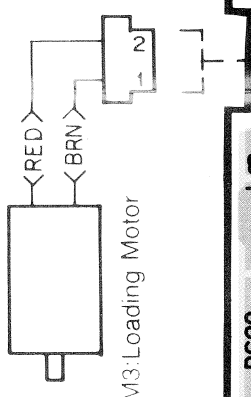
IC603 IC602 IC907 IC908 IC906 [E-5843A]

IC903
IC904
IC905

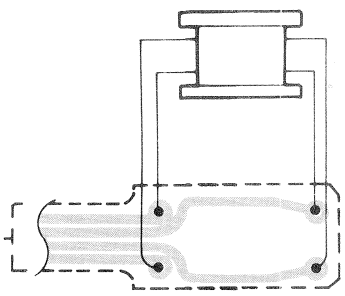
IC451

Q480

IC480



Optical
Pic-Up-Coil



[E-2355]

IC480 IC805 Q101

To Main P.C.B.
E-6482a CN500

IC101							
1	5.1V	10	2.6V	19	0V	28	2.5V
2	2.5V	11	2.6V	20	2.6V	29	2.6V
3	2.5V	12	2.6V	21	2.6V	30	2.6V
4	2.6V	13	2.7V	22	2.6V	31	2.5V
5	2.6V	14	2.7V	23	–	32	2.5V
6	0V	15	0.1V	24	2.7V	33	2.6V
7	0V	16	3.9V	25	0.8V	34	2.5V
8	0.8V	17	5.1V	26	2.5V	35	2.6V
9	2.6V	18	2.5V	27	3.6V	36	2.6V

IC903			
1	8.1V	11	0V
2	1.7V	12	0V
3	9.8V	13	0V
4	4.0V	14	9.8V
5	0V	15	–
6	4.0V	16	0V
7	5.0V	17	–
8	2.1V	18	11.2V
9	2.1V	19	10.1V
10	5.1V	20	1.8V

IC904			
1	8.2V	11	0V
2	1.7V	12	0V
3	9.8V	13	0V
4	4.1V	14	9.8V
5	0V	15	6.2V
6	3.5V	16	0V
7	5.0V	17	5.2V
8	2.3V	18	11.4V
9	1.8V	19	10.3V
10	5.1V	20	1.9V

IC907			
1	4.8V	9	5.2V
2	–	10	4.9V
3	9.8V	11	–
4	–	12	4.9V
5	–	13	4.9V
6	–	14	4.9V
7	–	15	–
8	5.2V	16	4.8V

IC908			
1	5.0V	9	5.0V
2	–	10	5.0V
3	9.8V	11	–
4	–	12	4.9V
5	–	13	4.9V
6	–	14	4.9V
7	–	15	–
8	5.0V	16	5.0V

IC480	
1	9.2V
2	0V
3	5.1V

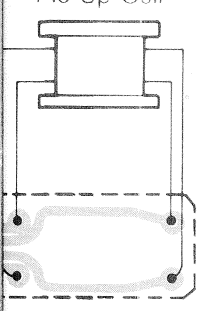
Q101	
B	3.9V
C	1.9V
E	4.6V

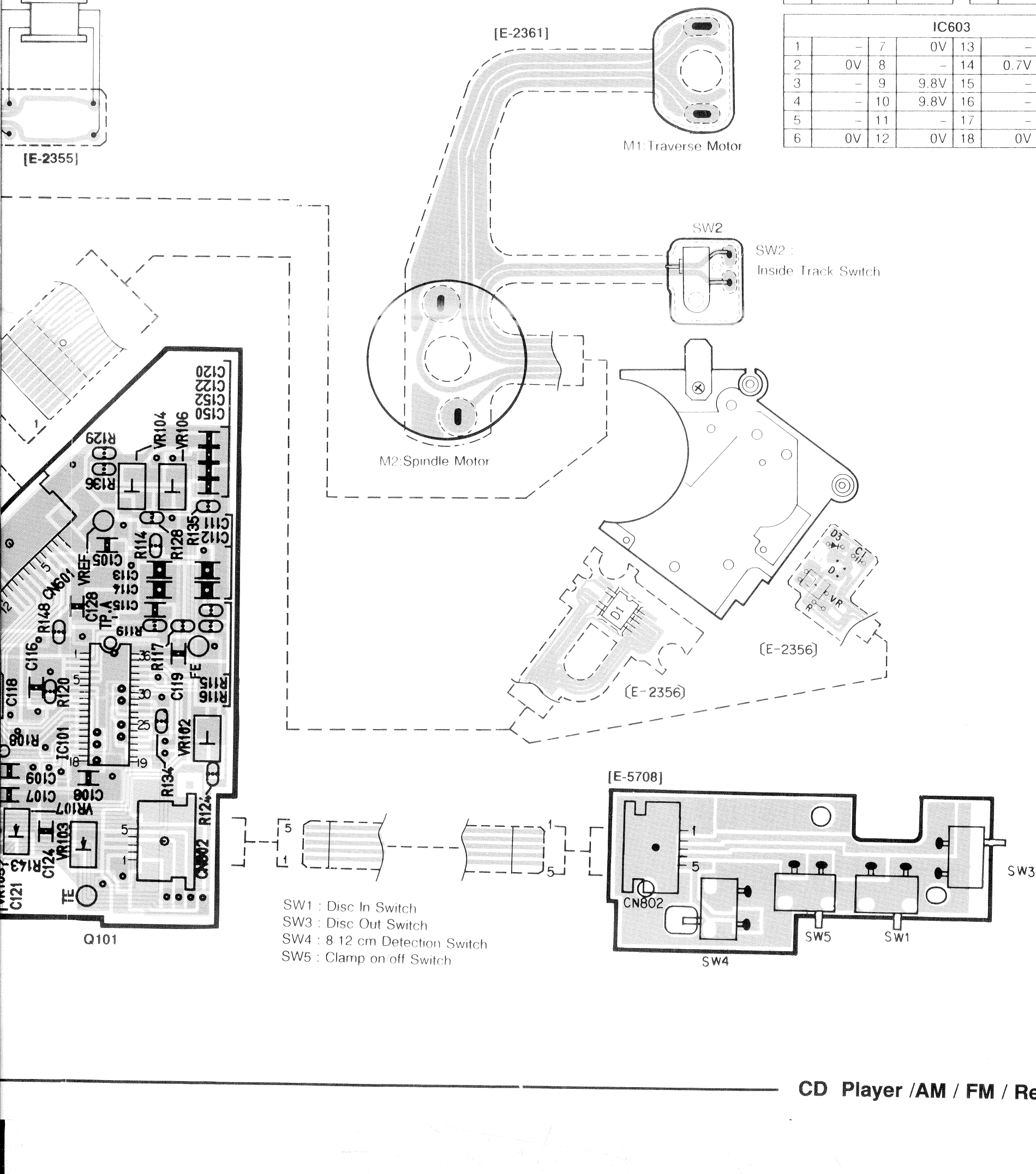
Q480	
B	9.2V
C	5.1V
E	9.8V

IC905			
1	0V	8	0V
2	2.1V	9	1.8V
3	2.1V	10	1.8V
4	2.1V	11	2.3V
5	2.1V	12	2.4V
6	0V	13	0V
7	0V	14	5.0V

IC906			
1	4.8V	8	4.9V
2	5.0V	9	4.3V
3	4.9V	10	4.3V
4	9.8V	11	0V
5	4.9V	12	4.3V
6	4.9V	13	4.2V
7	4.9V	14	4.8V

IC603							
1	–	7	0V	13	–	19	0V
2	0V	8	–	14	0.7V	20	–
3	–	9	9.8V	15	–	21	–
4	–	10	9.8V	16	–	22	–
5	–	11	–	17	–	23	0.7V
6	0V	12	0V	18	0V	24	–





OPERATION OF LSI <MAIN BLOCK>

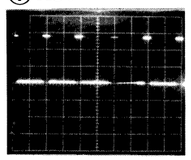
■ IC600, YEAM75108F93

Pin No.	Port	Description	I/O	Vol. (V)
1	K01	Key scan output	O	1.0
2	K00	Key scan output	O	0.9
3	VSS	Ground	—	0
4	SK	Not used	—	0
5	DK	Not used	—	0
6	$\overline{ST}$	FM Stereo signal detection	I	5.7
7	$\overline{RESET}$	System reset	I	3.8
8	X2	X'tal oscillator terminal	—	2.6
9	X1	X'tal oscillator terminal	—	0.2
10	PLL DI	PLL data input	I	4.7
11	PLL DO	PLL data output	O	0
12	PLL CLK	PLL clock	O	0
13	PLL CE	PLL chip enable	O	0
14	D. MUTE	CD mute	I	0
15~17	NC	Non connection	—	—
18	EMPH	Emphasis output	O	0
19	CE	Chip enable for IC400	O	0
20	VL DATA	Electric volume data	O	0
21	VL CLK	Electric volume clock	O	0
22	P. CONT	Power control output	O	5.0
23	ILLM.	Illum. control output	O	5.0
24	CONT A	AF select signal	O	0
25	CONT B	AF select signal	O	0
26	VSS	Ground	—	0
27	ACC	ACC detection	I	5.0
28	POW SW	Power switch signal	I	0
29	NC	Non connection	—	0
30	REMOCN	Not used	—	0
31, 32	NC	Non connection	—	0
33	AM SD	AM B/S detection	I	0
34	FM SD	FM B/S detection	I	1.9
35, 36	NC	Non connection	—	0
37	CD RST	CD controller reset	O	5.1
38	CD EJCT	CD eject	O	0
39	STP/STA	CD stop/start	O	0
40	BEEP	Beep output	O	0
41	CDSI	CD serial data input	I	0.2
42	CDSO	CD serial data output	O	0
43	CD CLK	Clock for CD data input	I	5.0
44	BATT	Battery detection	I	5.0
45	RSTB	MASH reset output	O	0

Pin No.	Port	Description	I/O	Vol. (V)
46, 47	NC	Non connection	—	—
48	MUTE	Mute output	O	3.7
49	P. DOWN	Power down mode signal	I	5.0
50	NC	Non connection	—	0
51	KI5	Key return input	I	0
52	KI4	Key return input	I	0
53	KI3	Key return input	I	0.8
54	KI2	Key return input	I	0
55	KI1	Key return input	I	0
56	KI0	Key return input	I	0
57	NC	Non connection	—	—
58	VDD	+5V power supply	—	5.0
59	LCD INH	LCD inhibit signal	O	0
60	LCD DAT	LCD data	O	0
61	LCD CE	LCD enable	O	0.1
62	LCD CLK	LCD clock	O	0
63	K03	Key scan output	O	1.0
64	K02	Key scan output	O	1.0

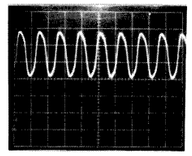
Note : Voltage measurements are with respect to ground, with a voltmeter (Internal resistance : 10M ohms.)

① K01



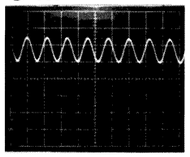
2V/DIV, 5mS/DIV

⑧ X2



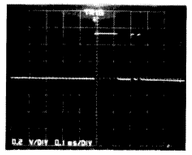
2V/DIV, 0.2μS/DIV

⑨ X1



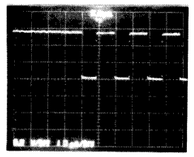
2V/DIV, 0.2μS/DIV

㊶ CD SI



2V/DIV, 0.1mS/DIV

㊸ CD CLK

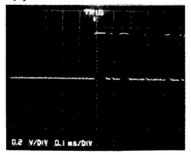


2V/DIV, 10μS/DIV

㊸ KI3

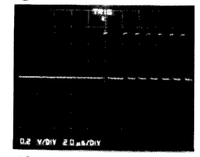
2V/DIV, 5mS/DIV

⑥⓪ LCD DAT



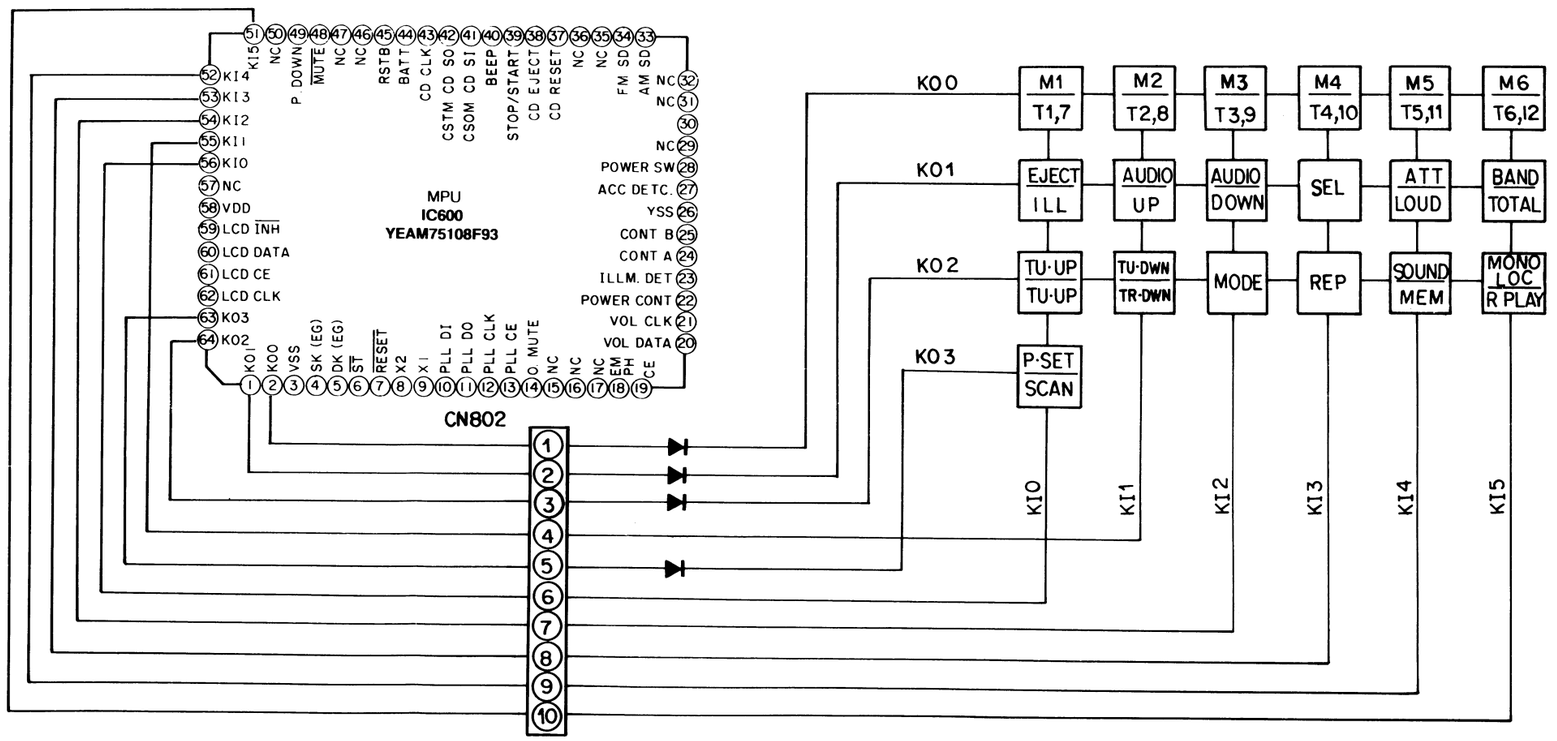
2V/DIV, 0.1mS/DIV

⑥② LCD CLK



2V/DIV, 20μS/DIV

- These waveforms are measured by using ten times (×10) probe.

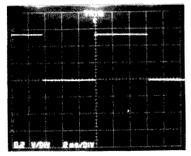


<DISPLAY BLOCK>

■ IC801, YEAMCF2111

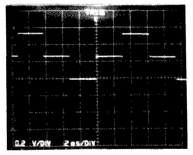
Pin No.	Port	Description	I/O	Vol. (V)
1	CLK	LCD clock input	I	0
2	VDD	+5V power supply	—	5.1
3	OSC	Oscillator terminal	—	3.3
4	VSS	Ground	—	0
5 ∫ 36	S32 ∫ S1	LCD segment data	O	2.5
37	BP2	LCD back plain 2	O	2.5
38	BP1	LCD back plain 2	O	2.5
39	DATA	LCD data input	I	0
40	DLEN	LCD select input	I	0.1

㊱ S1



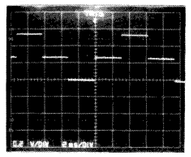
2V/DIV, 2mS/DIV

㊲ BP2

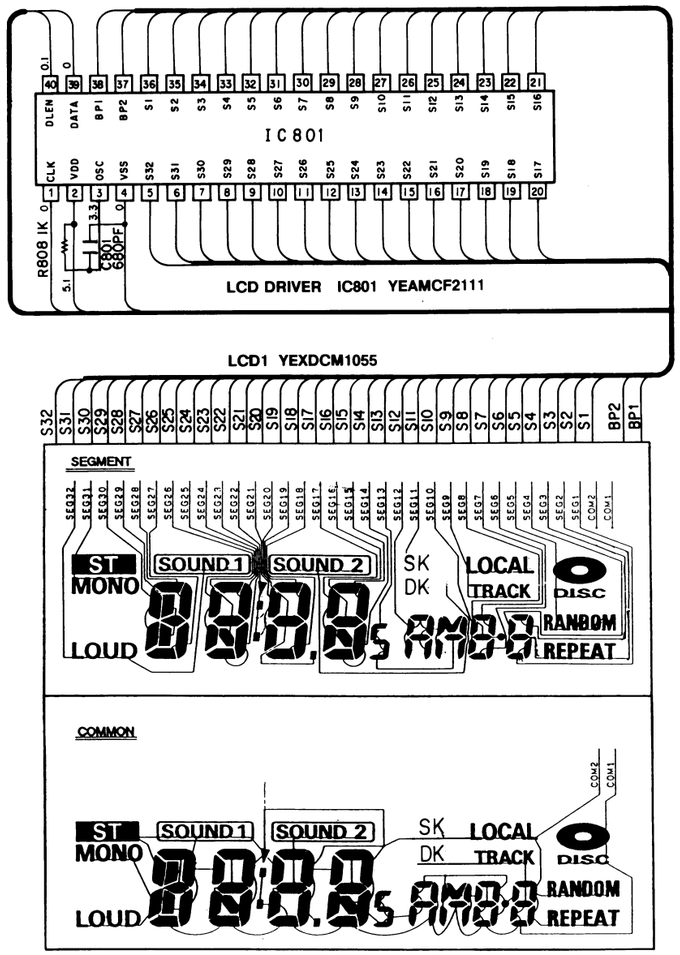


2V/DIV, 2mS/DIV

㊳ BP1



2V/DIV, 2mS/DIV

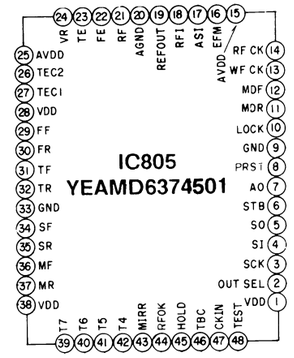


<CD DECK BLOCK>

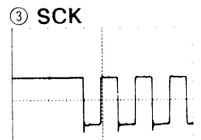
■ IC805 YEAMD6374501

- Name of terminals description of connection.

Pin No.	Port	Discription	I/O	Volt.(V)
1	VDD	+5V Power supply	—	5.1
2	OUTSEL	PWM output system selection	I	0
3	SCK	Serial clock	I	5.0
4	SI	Serial data input	I	1.4
5	SO	Serial data output	O	0.8
6	STB	Serial data strobe	I	5.0
7	AO	Data distinction signal	I	4.4
8	PRST	Reset input	I	5.1
9	GND	Ground	—	0
10	LOCK	Spindle servo error signal	I	5.1
11	MDR	Spindle motor serro (Reverse)	I	0
12	MDF	Spindle motor serro (Forsard)	I	0
13	WFCK	1 frame synchronizing signal	I	2.5
14	RFCK	1 frame synchronizing signal	I	2.5
15	AVDD	+5V Power supply for analog	—	5.1
16	EFM	EFM signal output	O	2.6
17	ASI	RF signal comaprison level	I	2.6
18	RFI	Analog-RF signal	I	2.4
19	REF OUT	ADC reference level	O	2.6
20	AGND	Analog Ground	—	0
21	RF	RF signal input	I	2.7
22	FE	Focus error input	I	2.6
23	TE	Tracking error input	I	2.6
24	VR	Reference Voltage input	I	2.5
25	AVDD	+5V Power supply for analog	—	5.1
26, 27	TEC2,1	Tracking comparator input	I	2.5
28	DVDD	+5V Power supply for digital	—	5.1
29	FF	Focus PWM forward	O	3.1
30	FR	Focus PWM reverse	O	2.9
31	TF	Tracking PWM forward	O	3.0
32	TR	Tracking PWM reverse	O	3.0
33	GND	Ground	—	0
34	SF	Sled PWM forward	O	2.1
35	SR	Sled PWM reverse	O	2.1
36	MF	Spindle PWM forward	O	2.4
37	MR	Spindle PWM forward	O	1.8
38	VDD	+5V Power supply for digital	—	5.1
39~41	T7~T5	(Connecting Ground)	—	0
42	T4	(Connecting VDD)	—	5.0
43	MIRR	MIRR signal detection	O	0
44	RF0K	RF0K signal detection	O	5.1
45	HOLD	(Connecting Ground)	—	0
46	TBC	(Connecting Ground)	—	0
47	CKIN	System clock input	I	2.8
48	TEST	(Connecting VDD)	—	5.1

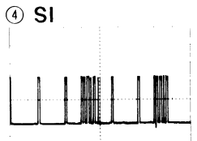


③ SCK



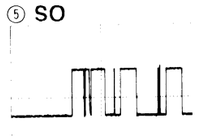
2V DIV, 0.5μS DIV

④ SI



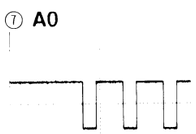
2V DIV, 0.5mS DIV

⑤ SO



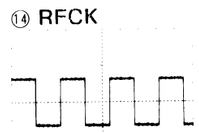
2V DIV, 50μS DIV

⑦ A0



2V DIV, 50μS DIV

⑭ RFCK

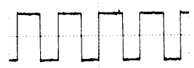


2V DIV, 50μS DIV

⑯ EFM

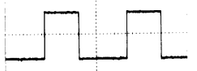
2V DIV, 2μS DIV

㉙ FF



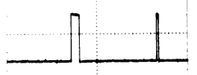
2V DIV, 5μS DIV

㉞ SF



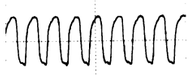
2V DIV, 10μS DIV

㊸ MIRR



2V DIV, 5μS DIV

㊼ CKIN

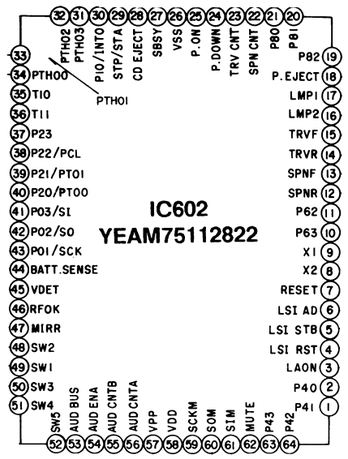


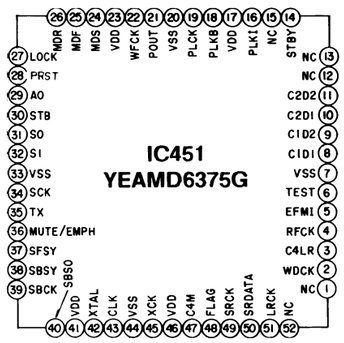
2V DIV, 50mS DIV

<CD DECK BLOCK>

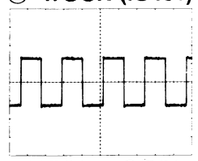
■ IC602 YEAM75112822

Pin No.	Port	Discription	I/O	Volt.(V)
1	P41	(Connecting Ground)	—	0
2	P40	JSW4 input	I	0
3	LAON	Laser power control	O	5.0
4	LSI RST	Reset	O	5.0
5	LSI STB	Data strobe	O	5.0
6	LSI A0	Communication control	O	5.0
7	RESET	Reset	I	5.0
8, 9	X2, 1	Crystal oscillator	—	2.5
10	P63	Non Connection	—	—
11	P62	Non Connection	—	—
12	SPNR	Spindle motor (Reverse)	O	0
13	SPNF	Spindle motor (Forward)	O	0
14	TRVR	Traverse motor (Reverse)	O	0
15	TRVF	Traverse motor (Forward)	O	0
16	LMP2	Loading motor (Save)	O	0
17	LMP1	Loading motor (Load)	O	0
18	P.EJECT	CD Eject	I	0
19	P82	(Connecting Ground)	—	0
20	P81	(Connecting Ground)	—	0
21	P80	(Connecting Ground)	—	0
22	SPN CNT	Spindle motor power control	O	5.0
23	TRV CNT	Traverse motor power control	O	5.0
24	P.DOWN	Power down control	O	5.0
25	P.ON	Servo power control	O	5.0
26	V_{SS}	Ground	—	0
27	SBSY	1 frame synchronizing signal	I	0
28	CD EJCT	CD eject input	I	0
29	STR/STP	Communication start/stop	I	0
30	P10	(Connecting Ground)	—	0
31～34	PTH03～00	(Connecting Ground)	—	0
35,36	T10,11	(Connecting Ground)	—	0
37	P23	Non Connection	—	—
38	T2	Test terminal 2	O	0
39	T1	Test terminal 1	O	0
40	WD	Watch dog signal	O	0
41	SI	Serial data input	I	1.0
42	S0	Serial data output	O	1.5
43	SCK	Serial clock	O	5.0
44	BAT.SNS	Battery sense	I	5.0
45	VDET	Servo gain switching request	I	5.0
46	RFOK	RF signal detection	I	5.0
47	MIRR	MIRR detection	I	5.0
48	SW2	Inside track switch	I	5.0
49	SW1	Disc In switch	I	0
50	SW3	Disc Out switch	I	0
51	SW4	12/8 cm detection switch	I	0
52	SW5	Clamp on/off switch	I	0
53	A.BUS	Not Used	—	0
54	A.ENA	Not Used	—	0
55	A.CNTB	Not Used	—	0
56	A.CNTA	Not Used	—	0
57	VPP	(Connecting VDD)	—	5.1
58	VDD	+5V Power supply	—	5.1
59	SCKM	Serial clock	O	5.1
60	SOM	Serial data output	O	5.1
61	SIM	Serial data input	I	5.1
62	MUTE	Mute output	O	5.1
63, 64	P43,42	(Connecting Ground)	—	0



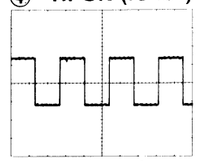


② WOCK (IC451)



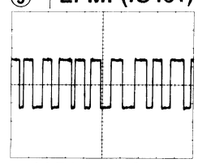
2V/DIV, 5μS/DIV

④ RFCK (IC451)



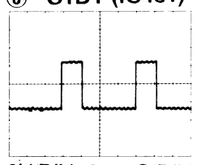
2V/DIV, 50μS/DIV

⑤ EFMI (IC451)



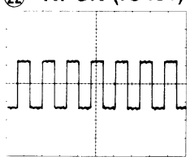
2V/DIV, 2μS/DIV

⑧ C1D1 (IC451)



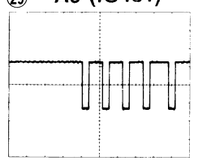
2V DIV, 0.1mS DIV

㉒ NFCK (IC451)



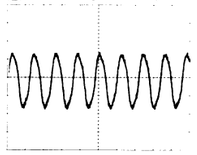
2V/DIV, 0.1mS/DIV

㉙ A0 (IC451)



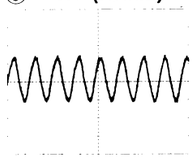
2V/DIV, 0.1mS/DIV

⑧ X2 (IC602)



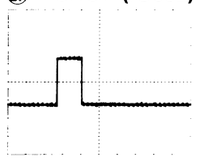
2V/DIV, 0.2μS/DIV

⑨ X1 (IC602)



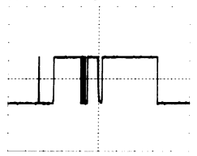
2V/DIV, 0.2μS/DIV

㉗ SBSY (IC602)



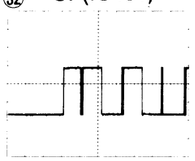
2V/DIV, 0.1mS/DIV

㉛ SO (IC451)



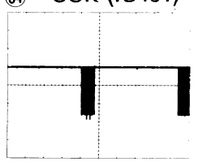
2V/DIV, 20μS/DIV

㉜ SI (IC451)



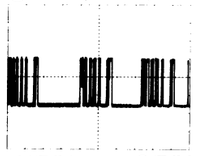
2V/DIV, 50μS/DIV

㉞ SCK (IC451)



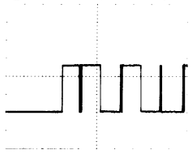
2V/DIV, 10μS/DIV

㊶ SI (IC602)



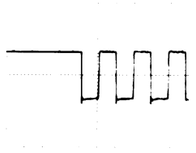
2V/DIV, 0.5mS/DIV

㊷ SO (IC602)



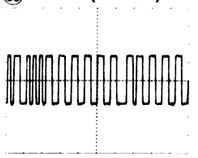
2V/DIV, 50μS/DIV

㊸ SCK (IC602)



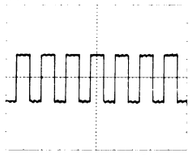
2V/DIV, 0.5μS/DIV

㉟ TX (IC451)



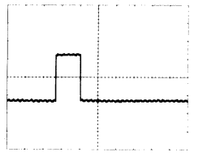
2V/DIV, 1μS/DIV

㊲ SFSY (IC451)



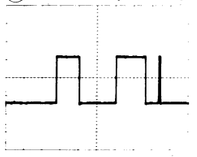
2V/DIV, 0.1mS/DIV

㊳ SBSY(IC451)



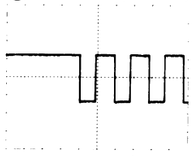
2V/DIV, 0.1mS/DIV

㊼ MIRR (IC602)



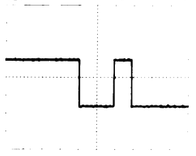
2V/DIV, 10μS/DIV

㊾ SCKM (IC602)



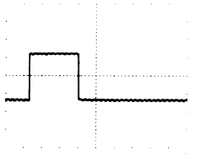
2V/DIV, 10μS/DIV

㊿ SOM (IC602)



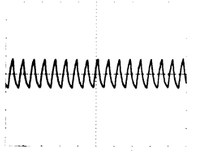
2V/DIV, 20μS/DIV

㊵ SBSO (IC451)



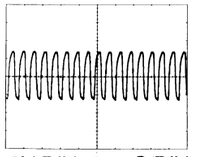
2V/DIV, 0.1mS/DIV

㊸ XTAL (IC451)



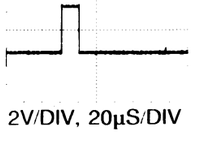
2V/DIV, 0.1μS/DIV

㊺ XCK (IC451)



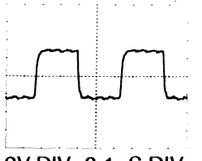
2V/DIV, 0.1μS/DIV

㊶ SIM (IC602)



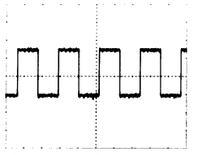
2V/DIV, 20μS/DIV

㊾ SRCK (IC451)



2V DIV. 0.1μS DIV

㊶ LRCK (IC451)



2V/DIV, 10μS/DIV

■ IC451 YEAMD6375G

Pin No.	Port	Discription	I/O	Volt.(V)
1	NC	Non Connection	—	—
2	WDCK	2 times LRCK frequency	O	2.5
3	C4LR	Non Connection	—	—
4	RFCK	1 frame synchronizing signal	O	2.5
5	EFM1	EFM signal input	I	2.5
6	TEST	(Connecting Ground)	—	0
7	VSS	Ground	—	0
8, 9	C1D1, 2	C1 error status	O	0
10, 11	C2D1, 2	C2 error status	O	0
12, 13	NC	Non Connection	—	—
14	STBY	Stand-by input	I	0
15	NC	Non Connection	—	—
16	PLK1	Non Connection	—	—
17	VDD	+5V power supply	—	5.1
18	PLKK8	(Connecting Ground)	—	0
19	PLCK	Non Connection	—	—
20	VSS	Ground	—	0
21	POUT	Non Connection	—	—
22	WFCK	1 frame synchronizing signal	O	1.0
23	VDD	+5V power supply	—	2.5
24	MDS	Non Connection	—	1.7
25	MDF	Spindle motor Servo (Forward)	O	0
26	MDR	Spindle motor Servo (Reverse)	O	0
27	LOCK	Spindle Servo error signal	O	5.1
28	RST	Reset input	I	5.1
29	AO	Data distinction signal	I	4.4
30	STB	Serial data strobe	I	5.0
31	SO	Serial data output	O	0.8
32	SI	Serial data input	I	1.4
33	VSS	Ground	—	0
34	SCK	Serial clock	I	5.0
35	T_X	Digital audio data	O	2.5
36	MUTE	Non Connection	—	—
37	SFSY	Sub-code syncmizing signal	O	2.8
38	SBSY	Sub-code block signal	O	0
39	SBCK	Sub-code clock	I	0
40	SBSO	Sub-code data	O	0
41	VDD	+5V power supply	—	5.1
42	XTAL	Non Connection	—	—
43	CLK	Crystal oscillator	I	2.4
44	VSS	Ground	—	0
45	XCK	Oscillator output	O	2.8
46	VDD	+5V power supply	—	5.1
47	C4M	Non Connection	—	2.5
48	FLAG	Error correction flag	O	0
49	SRCK	Serial clock output	O	2.5
50	SRDATA	Serial sound data	O	2.5
51	LRCK	Left/Right distinction signal	O	2.5
52	NC	Non Connection	—	—

ALIGNMENT INSTRUCTIONS / ABGLEICH ANLEITUNG

1. MEASURING INSTRUMENTS AND TOOLS

1. CD adjusting jig YESFZ5019
2. Two-channel oscijloscope
3. Low-frequency oscillator
4. Screwdriver for adjusting semi-fixed variable resistors
5. Test disk CDT-002, (SZZP1014F), Music Disc.

2. ALIGNMENT PROCEDURES AND POINTS

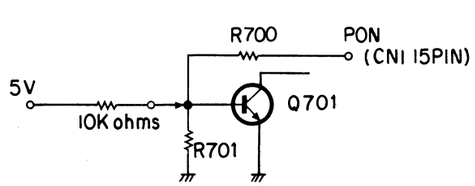
1. Tracking offest alignment	VR106	
2. Tracking balance alignment	VR101	Test point TE
3. RF offset alignment	VR107	Test point RF
4. Focus balance alignment	VR103	Test point RF/FE2
5. Focus gain alignment	VR102	Test point R198 both ends
6. Tracking gain alignment	VR105	Test point R199 both ends
7. Focus offset alignment	VR104	Test point RF

3. ADJUSTING METHODS

※ Make use of 10:1 oscilloscope probe.

1) Tracking offset alignment (VR106)

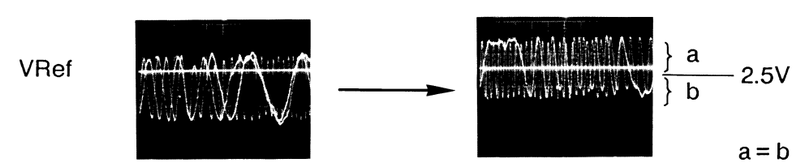
- Test point : TE . . . . . Oscilloscope CH1
  VREF2 . . . . . Oscilloscope CH2
- Oscilloscope setting : CH1, CH2 . . . . . 50mV/div, 1mS/div, DC, AUTO
- Operation : (1) Play the music disc.
  (2) The power is supplied to IC602 by applying 5V power between R701 and R700 via 10K ohms.



- Set CH1 and CH2 of the oscilloscope in the GND position of GND and switch AC to DC. At that time, check to ensure that the line of CH1 is overlapped with that of CH2. If they are not overlaid, make adjustment with VR106.

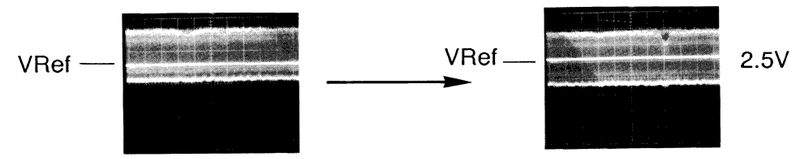
2) Tracking balance alignment (VR101)

- Test point : VREF2 . . . . . Oscilloscope CH1
  TE . . . . . Oscilloscope CH2
- Oscilloscope setting : CH1, CH2 . . . . . 0.5mV/div, 0.5mS/div, DC, AUTO
- Jig setting(YESFZ5019) :SW1 . . . . . Test side
  Clip (Brown) . . . . . Open
  Clip (Red) . . . . . Connect the oscilloscope to TE2 and make adjustment with VR101 until the amplitude of the upper and lower waves of the TE signal becomes symmetrical while the waveform is being displayed on the oscilloscope (for about 10 seconds) .
- Operation : Play the music disc.
- Waveform :



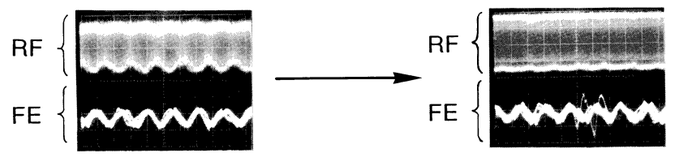
3) RF ofset alinment (VR107)

- Test point : RF . . . . . Oscilloscope CH1
  VRFE2 . . . . . Oscilloscope CH2
- Oscilloscope setting : CH1, CH2 . . . . . 50mV/div, 0.5mS/div, DC, AUTO
- Operation : Play the music disc.
- Alignment : Make alignment until the center of the RF signal amplitude becomes VREF voltage of 2.5V using VR107.
- Wave form :



4) Focus balance alignment (VR103)

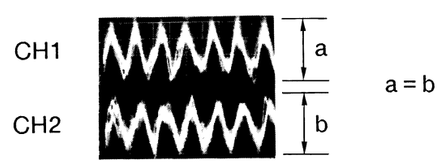
- Test point : RF . . . . . Oscilloscope CH1
  FE2 . . . . . Oscilloscope CH2
- Oscilloscop setting : CH1 . . . . . 1V/div, 0.5mS/div, AC, AUTO
  CH2 . . . . . 50mV/div, 0.5mS/div, AC, AUTO
- CD adjusting jig connection (YESFZ5019)
  Clip (Gray) . . . . . Chassis (GND)
  Lead IN (Brawn) . . . . Test point FE1
  Lead OUT (Red) . . . . Test point FE2
- CR Oscillator : 1.3KHz, 280mVp-p
- Operation : (1) Play the music disc track #6.
  (2) Adjust the amplitude of the RF signal until its lower edge is flat using VR103. (The lower edge of the RF signal amplitude comes in a mid-point between the FE amplitude and in phase or reverse phase.)
- Wave from :



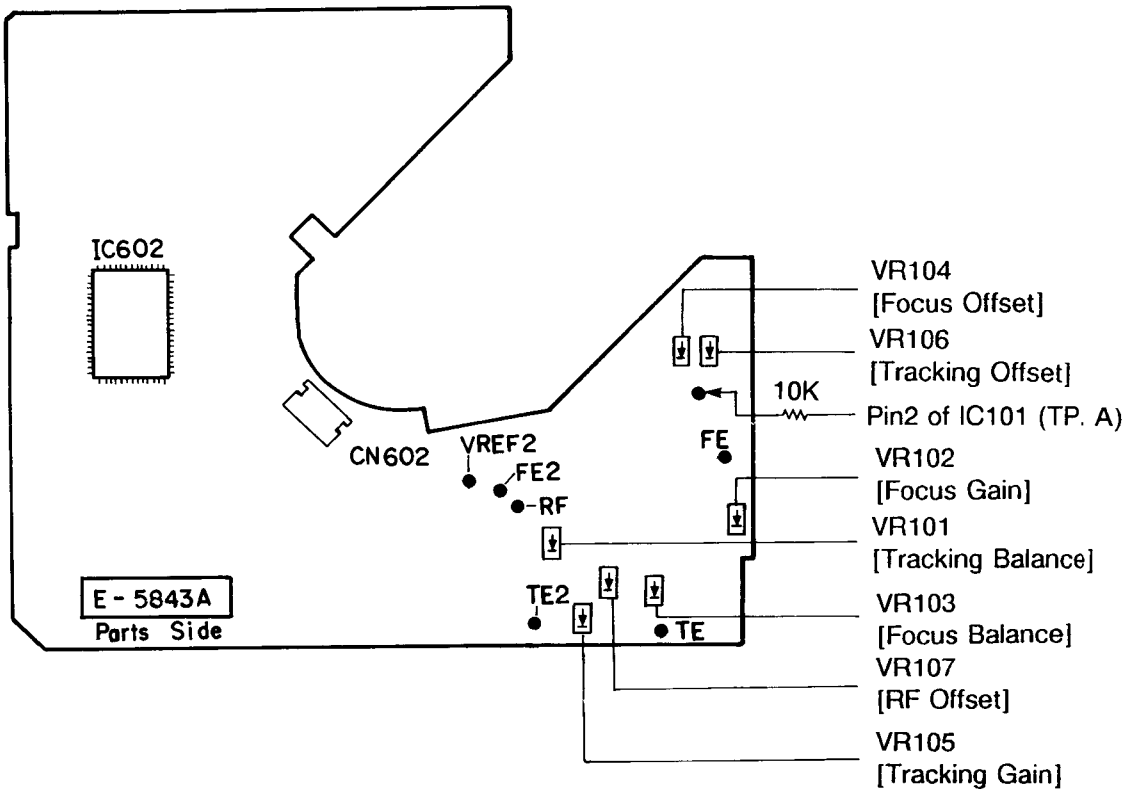
5) Focus gain alinment (VR102)

★ Change connection of oscilloscope in step3 to the adjusting jig and proceed with the focus gain alignment.

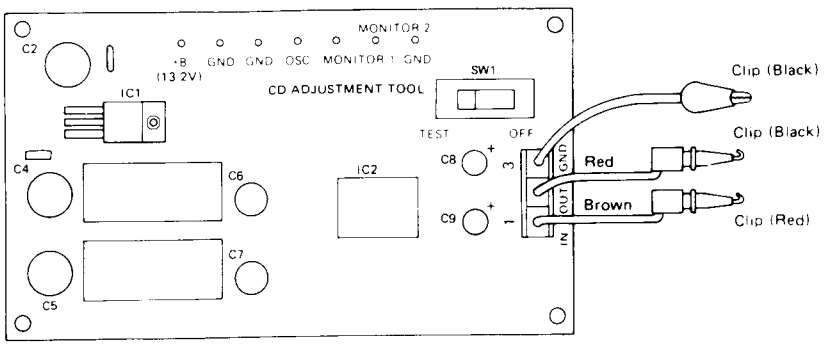
- Test point : CD adjusting jig-Monitor1 . . . Oscilloscope CH1
  CD adjusting jig-Monitor2 . . . Oscilloscope CH2
- Oscilloscope setting : CH1, CH2 . . . . . 20mV/div, 0.5mS/div, AC, AUTO
- Operation : Turn VR102 to adjust the amplitude of CH1 and that of CH2 until these become symmetrical.
- Waveform :



ALIGNMENT POINTS / ABGLEICHPUNKTE



CD GAIN ALIGNMENT JIG (YESFZ5019)

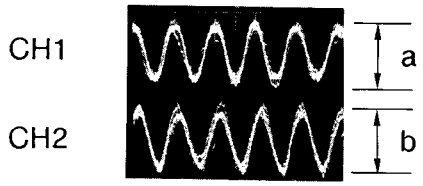


6) Tracking gain alignment (VR105)

★ The same as step 5) "Focus gain alignment" except the following :

- CD adjusting jig connection (YESFZ5019)
  Lead IN (Brown) . . . . Test point for TE
  Lead OUT (Red) . . . . Test point for TE2
- CR Oscillator : 1KHz, 280mV$_{P-P}$
- Operation : Play the music disc.
- Alignment (1) : Adjust VR105 until the amplitude of CH1 and CH2 are equal.
- Waveform :

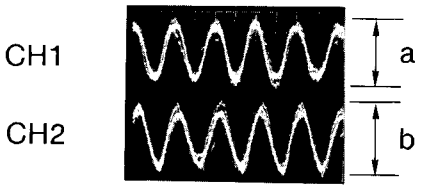
(1)



a = b

- Alignment (2) : Check to be sure that the amplitude of CH2 signal becomes 1.2 : 1 when grounding is done by applying a 10kohm load to the BP side (+) of R119 is the vibration detector circuit, when the ground is shouted with the BP side R119 in the vibration sensing circuit via 10 Kohms.
- Waveform :

(2)

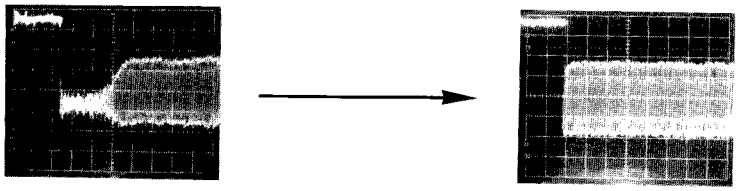


a : b = 1.2 : 1

7) Focus offset alignment (VR104)

- Test point : RF . . . . . Oscilloscope CH1
- Oscilloscope setting : CH1 . . . . . 50mV/div, 0.5mS/div, AC, NORM
- Operating : Play the test disc CDT002 track #9.
- Alignment : (A) Oberve the rising edge of a pulse depression and turn VR104 to adjust the RF signal until the width and height of the lower edge the signal are reduced to a minimum.
  (B) Check to be sure that the amplitude level of the RF signal is below 1.4V.

RF

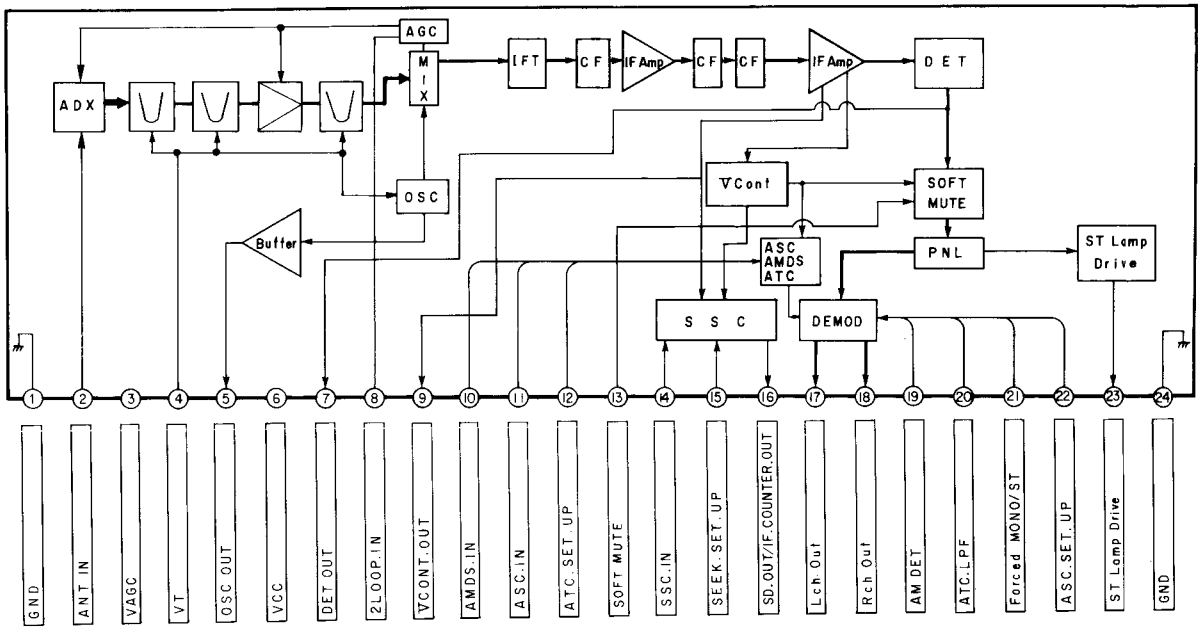


Adjust to minimize a depression. More than 1.4V

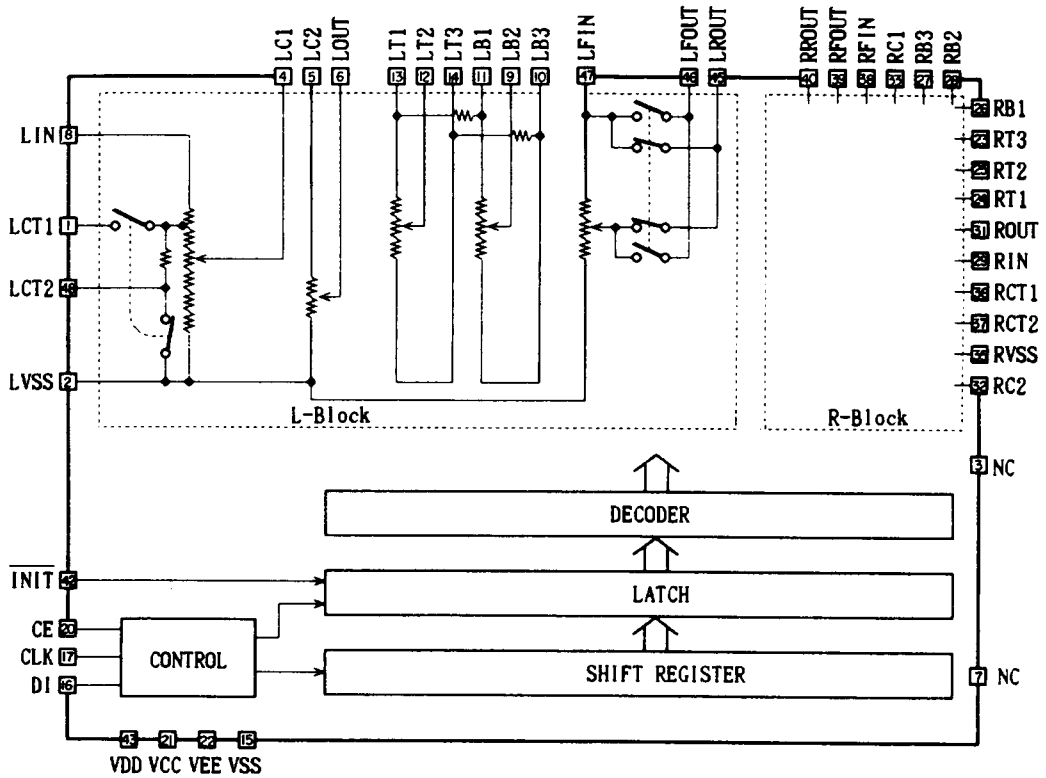
PACKAGE AND IC BLOCK DIAGRAM

<E-6482>

• IC100 YEPOPTY326A0

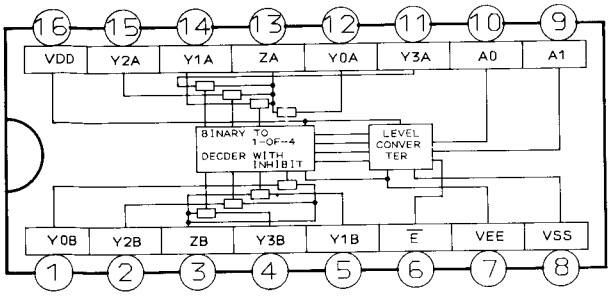


• IC400 YEAMLC7537AN

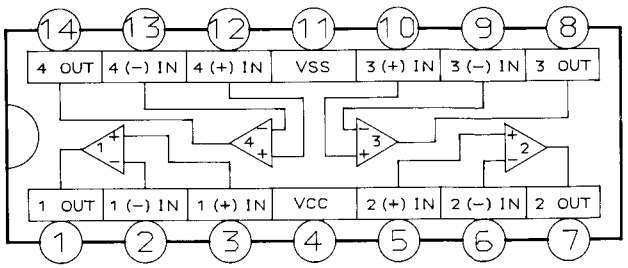


<E-6482>

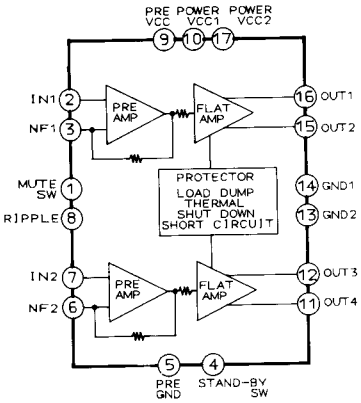
● IC271 YEAMPD4052T2


16 15 14 13 12 11 10 9
VDD Y2A Y1A ZA Y0A Y3A A0 A1
BINARY TO 1-OF-4 DECDER WITH INHIBIT
LEVEL CONVER TER
Y0B Y2B ZB Y3B Y1B Ē VEE VSS
1 2 3 4 5 6 7 8

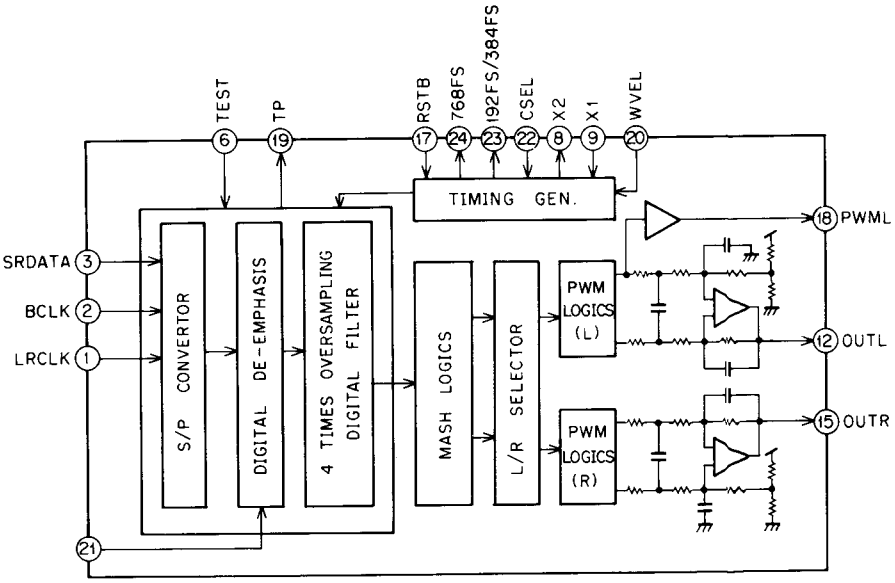
● IC280 YEAMM5228FT1



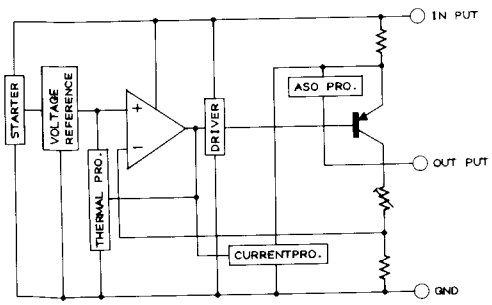
● IC310, 311 YEAMTA8205AH



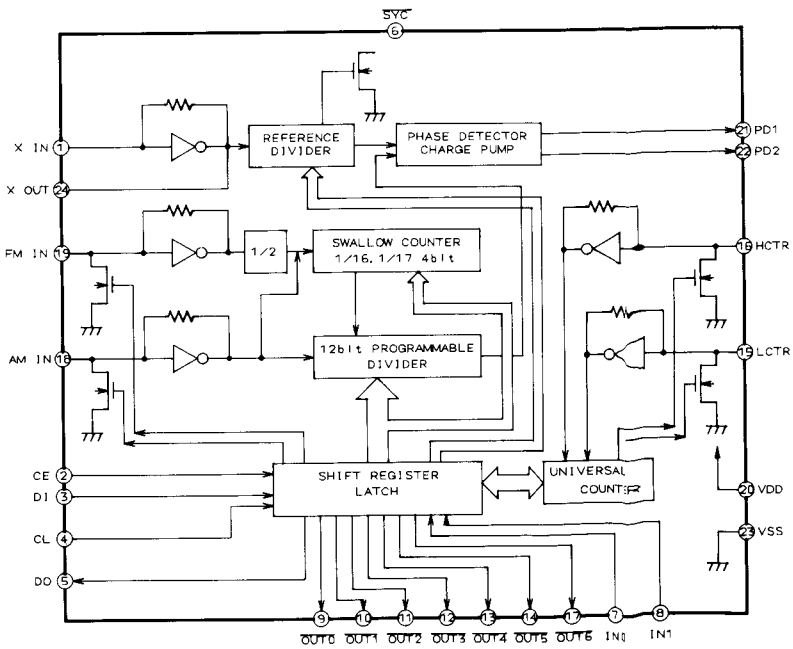
● IC501 MN6475B



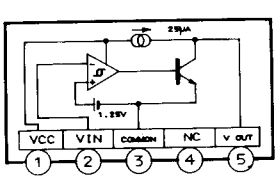
● IC700 YEAMPC2410HF



● IC551 YEAMLC7218M

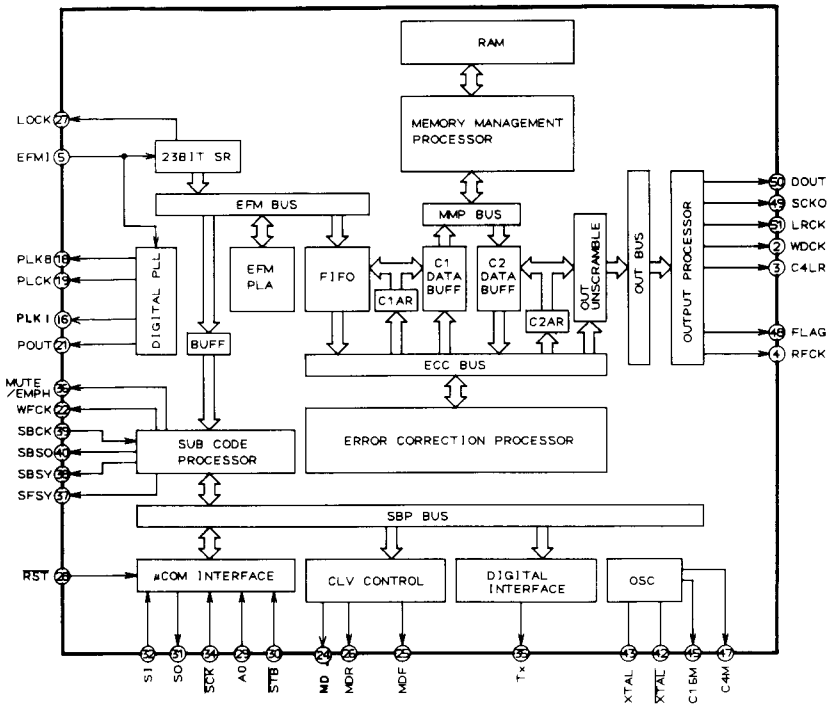


● IC720, 721 YEAMM51945AL

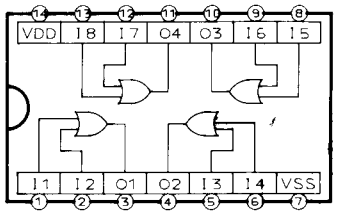


<E-5843A>

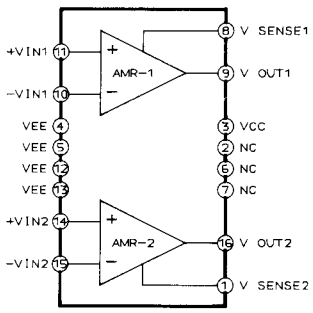
● IC451 YEAMD6375G



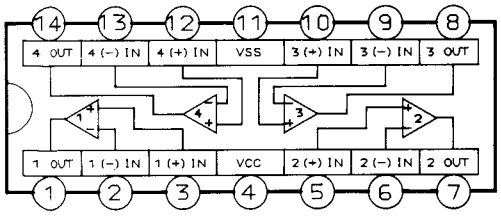
● IC905 MN4071BST1



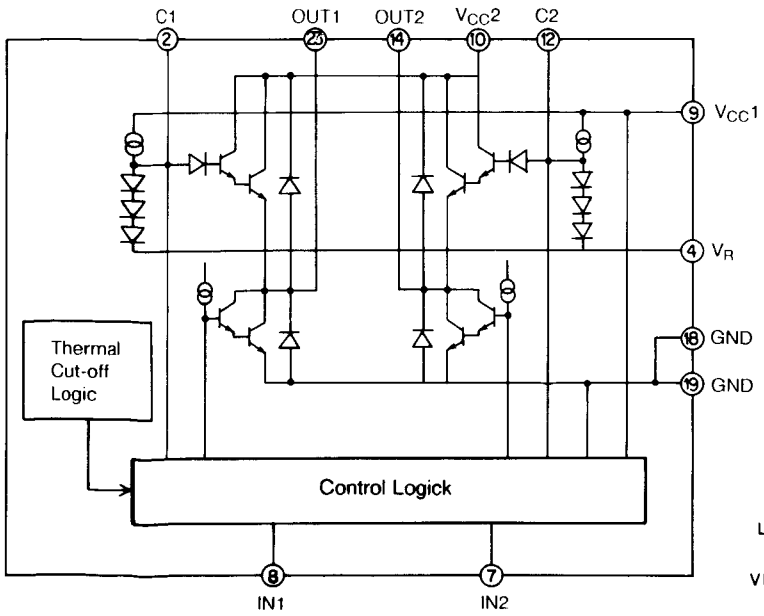
● IC907, 908 YEAMTA8406F



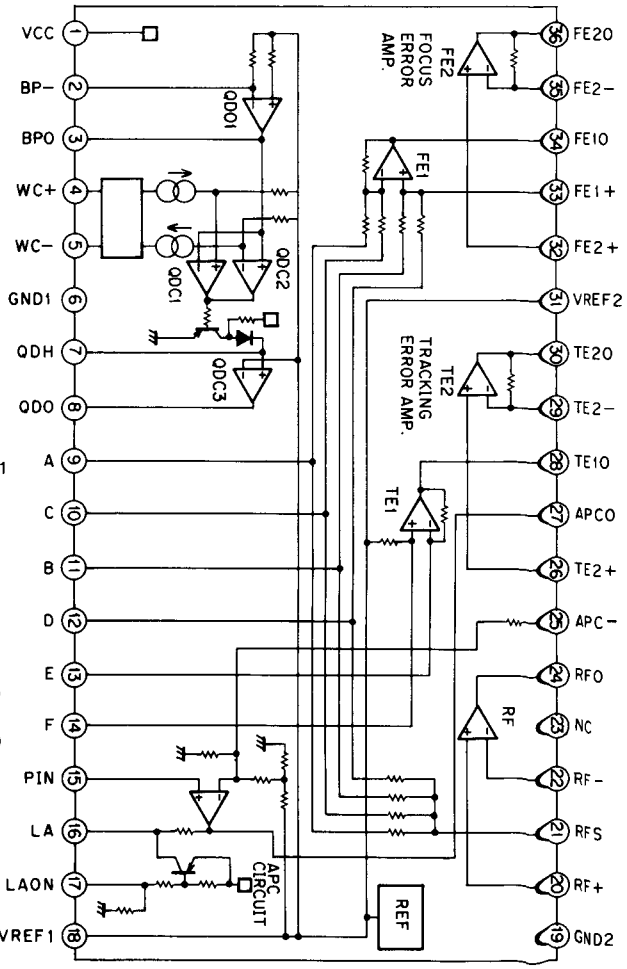
● IC906, ● IC401~403 (E-6482) YEAMPC4574T1



● IC603 YEAMBA6219BF

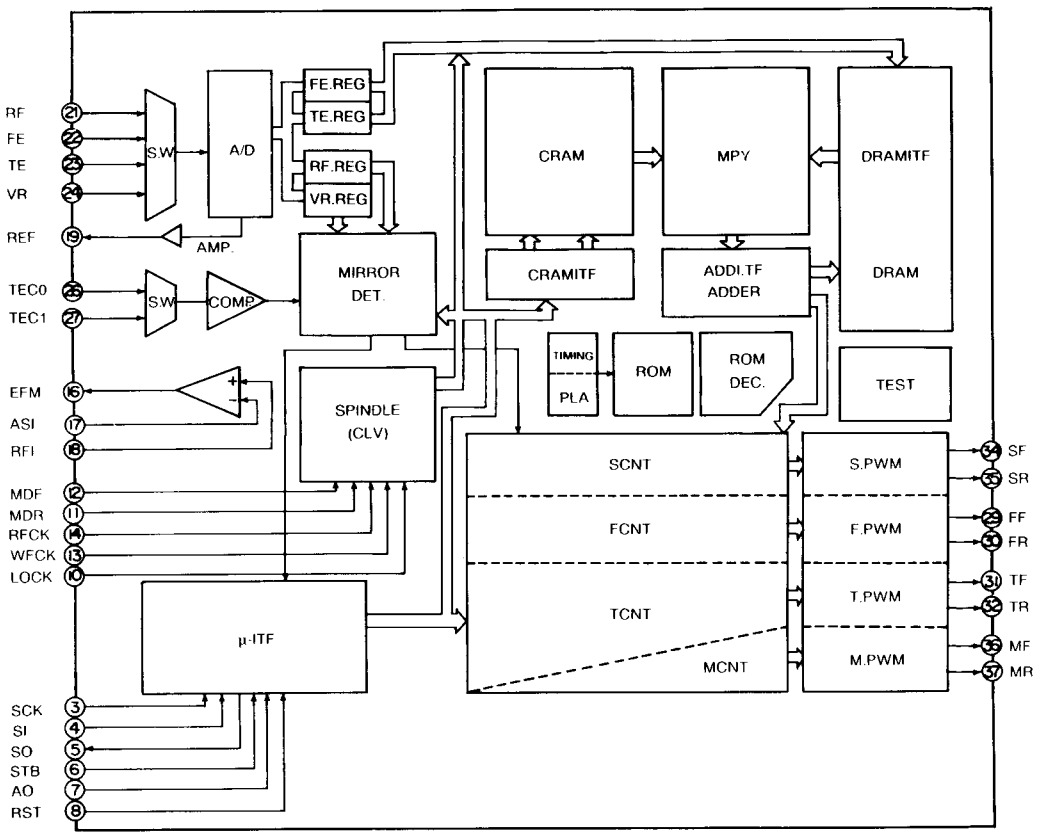


● IC101 YEAMC2570G

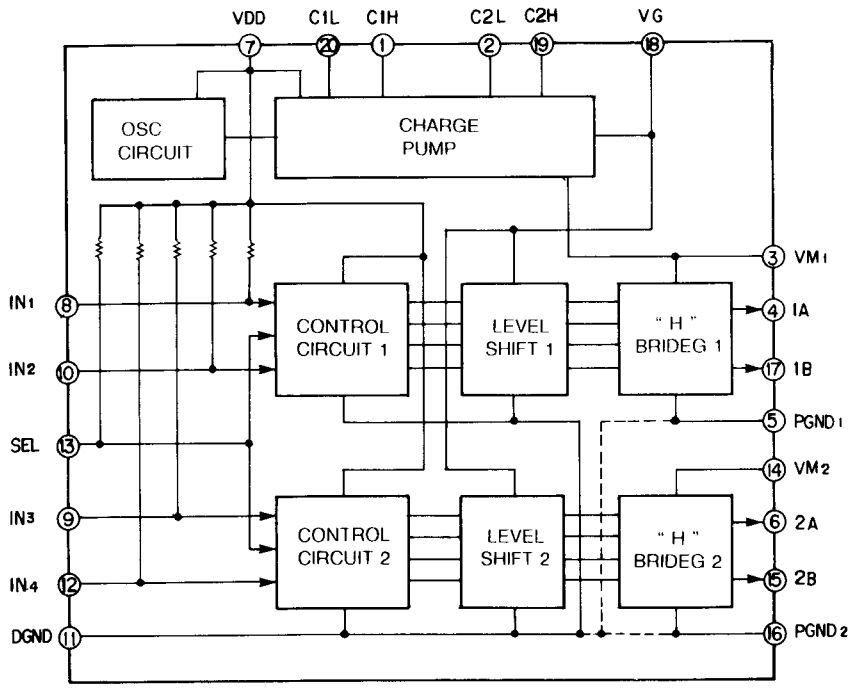


<E-5843A>

• IC805
YEAMD637501



• IC903, 904
YEAMD16808G



Replacement Parts List
Models NO. CQ-DP37VEG/LEE

NOTES :

1. Be sure to make your orders of replacement parts according to this list.
2. Important safety notice : Components identified by ⚠ mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.
3. Next to the Ref. No. in the parts list is a location key, to show the general location of the parts shown in the exploded drawing, as in a road map.
4. Printed circuit board assembly with mark (NLA) is no longer available after production discontinuation of the complete set.

Ref. No.	Part No.	Part Code	Part Name & Description	Pcs set	Remarks
MISCELLANEOUS					
Z100	YEAL02010T		Neon Tube	1	
F1	XBB1C30NR1		Fuse	1	
F2	XBA1C100NS1		Fuse 10A	1	
PL801	YEAL01184		Pilot Lamp	1	
PL804, 805	YEAL01184		Pilot Lamp	2	
PL808, 810	YEAL01184		Pilot Lamp	2	
CJ1, 2	YEAEBTE06S1S		6P Connector	2	
CJ3	YEAE0210RAA		10P Connector	1	
CJ4	YEAETSBS0307		3P Connector	1	
CJ5	YEAE02151		Jack	1	
CJ801	YEAE0110TKCX		10P Connector	1	
CJ802	YEAE0112TKCX		12P Connector	1	
CN1, 2	YEAEBTE06P1R		6P Connector	2	
CN401	YEAE0106WK		6P Connector	1	CQ-DP37VEG Only
CN500	YEAE0124TKCB		24P Connector	1	
CN700	YEAE011835		20P Connector	1	
CN801	YEAE012041		10P Connector	1	
CN802	YEAE012040		12P Connector	1	
CP1, 2, 3	YEAE0104IWK		4P Connector	3	
1 (4-B)	YEFA031237		Upper Cover	1	
2 (1-B)	YEFA05505		Under Cover	1	
3	YEFA13864		Case for RDS PCB	1	CQ-DP37VEG Only
4 (3-A)	YEFX0213446		Mounting Bracket	1	
5 (2-B)	YEFK06457A		Holder	1	
7 (2-A)	YEFV011392		Insulator	1	
8 (1-B)	YEFV011477		Insulator	1	
9 (2-A)	YEFC023889		Escutcheon Assy	1	CQ-DP37VEG Only
	YEFC023891			1	CQ-DP37LEE Only
10 (2-B)	YEFA07302A		Front Plate	1	
11 (2-C)	YEFA09389BK		Side Plate (R)	1	
12 (3-B)	YEFA09390		Side Plate (L)	1	
13 (3-C)	YEFF01674		Heat Shink	1	
14 (2-A)	YEFA13903		Case	1	
15 (1-C)	YEFX0212814		Mounting Bracket for IC	2	
16 (2-C)	YEFX0213143		Mounting Bracket for Connector	1	
17 (1-A)	YEFG09051		Mounting Bracket	1	
19 (2-A) (2-B)	YEFR04333		Illumi, Cap	5	
21 (2-A)	YEFV02971A		Shade	1	
22 (2-A)	YEFX0011106		Panel Light	1	
23 (4-C)	YEFX233435		Clamper	1	
24 (4-C)	YEFK06409		Choke Holder	1	
25 (4-C)	YEFR04462		RCA Cap	2	
26 (4-C)	YEAJ011197		Power Cord	1	
27 (4-C)	YEAJ011252		Power Cord	1	
28 (4-C)	YEAJ02583		Power Cord	1	
29 (4-C)	YEAJ09267		Ground Wire	1	
30 (3-B)	YEFJ05030		Rivet	1	
31 (2-C)	YEFJ05041		Rivet	1	
32 ⊙	YEJV08036		Screw	2	
33 ◉	XSB26 + 4FX		Screw	4	
34 ◉	XSS5 + 8FX		Screw	2	
35 ☆	XTB3 + 6FFX		Screw	9	
36 ★	XTV2 + 6GFX		Screw	5	
37 ※	XTB3 + 10FFX		Screw	3	
38 ◘	YEJS05024		Screw	4	
39	YEP0PT6482D0		PCB w/Component NLA	1	CQ-DP37VEG Only
	YEP0PT6482C0			1	CQ-DP37LEE Only
40	YEP0PT2226R0		PCB w/Component NLA	1	CQ-DP37VEG Only
	YEP0PT2226J0			1	CQ-DP37LEE Only

Ref. No.	Part No.	Part Code	Part Name & Description	Pcs set	Remarks
41 (3-C)	YEFA031111		Upper Cover for Heat Shink	1	
42 (1-A)	YEFC05481A		Handle Cover	1	
43 (1-A)	YEFC05482A		Handle Cover	1	
44 (1-A)	YEFS01817		Pad	2	
45 (1-A)	YEFX0213127A		Handle Assy	1	
46 (1-C)	CR2032-1HF1		Battery	1	
47 (2-B)	YEFK04514		Pilot Lamp Holder	5	
48	YEP0PT5541B0		PCB w/Component (RDS) NLA	1	CQ-DP37VEG Only
50 (2-A)	YEFK06430A		LCD Holder	1	
51 (4-B)	YEFX0213148		QRB	1	

ICs AND TRANSISTORs

[E6482] **MAIN BLOCK**

PA10	YEP0PT5541B0		VF	1	CQ-DP37VEG Only
PA51	YEAU03SKM14		FM Front End	1	
PA100	YEP0PTY326A0		AM Tunner	1	
IC271	YEAMPD4052T2		IC	1	
IC280	YEAMM5228FT1		IC	1	
IC310, 311	YEAMTA8205AH		IC	2	
IC400	YEAMLC7537AN		IC	1	
IC401 to 403	YEAMPC4574T1		IC	3	
IC501	MN6475B		IC	1	
IC551	YEAMLC7218M		IC	1	
IC600	YEAM75112756		IC	1	
IC700	YEAMPC2410HF		IC	1	
IC701	AN78N05		IC	1	
IC720, 721	YEAMM51945AL		IC	2	
IC723	YEAMPC78L05T		IC	1	
IC724	YEAML7809		IC	1	
IC801	YEAMCF2111TT		IC	1	
Q10	YEANC144EKTX		Transistor	1	CQ-DP37VEG Only
Q100	YEANC144EKTX		Transistor	1	

Ref. No.	Part No.	Part Code	Part Name & Description	Pcs set	Remarks
Q101	2SD1030TX		Transistor	1	
Q200, 201	YEANC4081STX		Transistor	2	
Q281	YEANC4081STX		Transistor	1	
Q300, 301	YEANC4081STX		Transistor	2	
Q381	YEANC4081STX		Transistor	1	
Q500	YEANBP1F3PT		Transistor	1	
Q501, 502	YEANDTC144ST		Transistor	2	
Q503	YEAN2SA1244		Transistor	1	
Q601	YEANC144EKTX		Transistor	1	
Q641	YEAN2SK583		Transistor	1	
Q650	YEAN2SB810		Transistor	1	
Q700	YEANB1117KUT		Transistor	1	
Q701	YEAND2144STW		Transistor	1	
Q720, 721	YEAN2SD1020		Transistor	2	
Q722	YEANC144EKTX		Transistor	1	
Q723	YEANBP1F3PT		Transistor	1	
Q726, 727	YEANFP1F3PT1		Transistor	2	
Q730	YEANA144EKTX		Transistor	1	
Q731	YEANA812		Transisstor	1	
Q732	YEAN2SD2007		Transistor	1	
Q733	2SD1244		Transistor	1	
Q734	YEANBP1F3PT		Transistor	1	
Q735	2SB948A		Transistor	1	
Q736	YEAND2144STW		Transistor	1	
Q737	YEANA144EKT		Transistor	1	

[E5541] **RDS BLOCK** **CQ-DP37VEG ONLY**

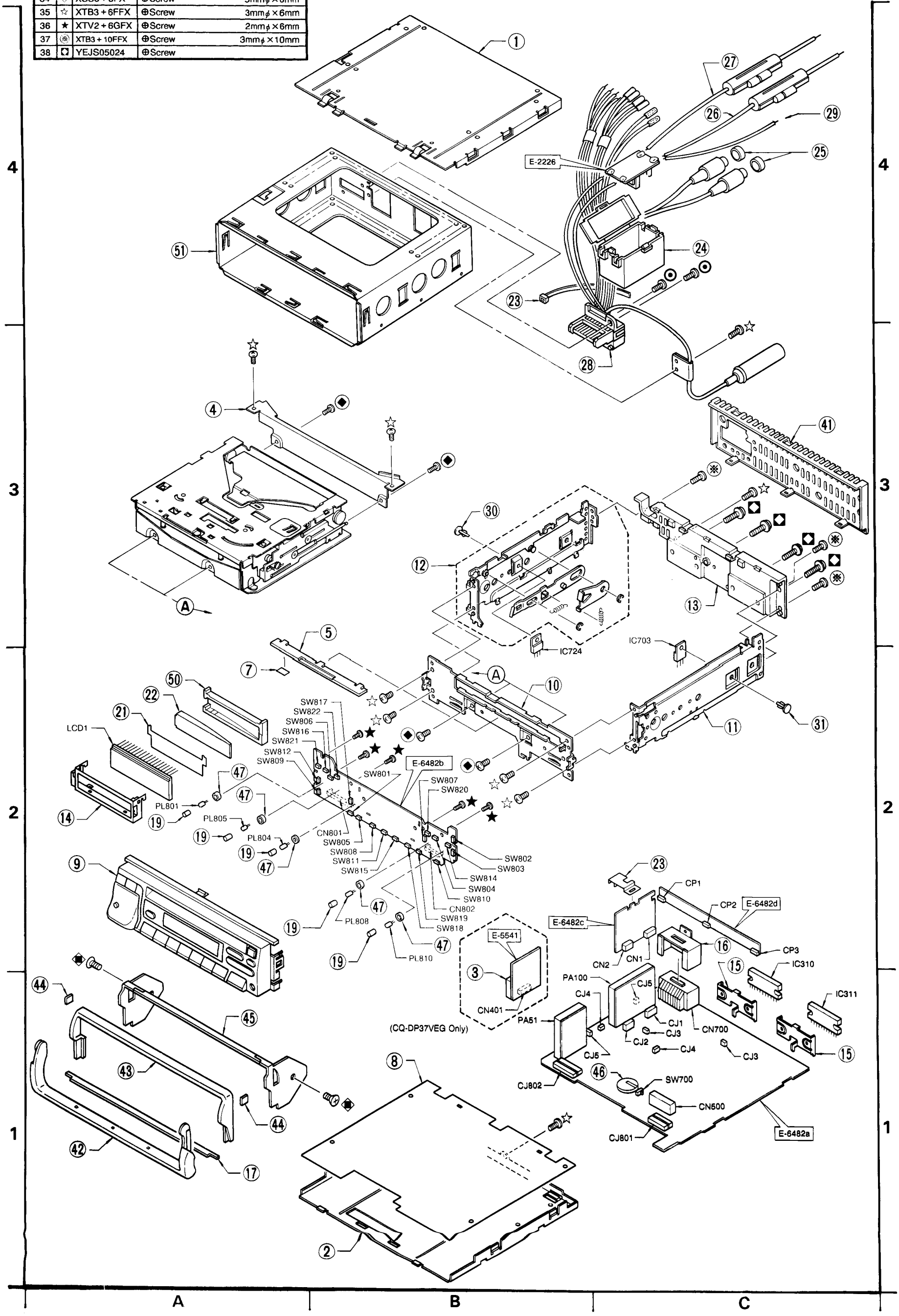
IC401	YEAMTDA1579		IC	1	
IC402	YEAMM5218AFE		IC	1	

EXPLODED VIEW (UNIT) / AUFGELÖTE DARSTELLUNGS (GANZES GERÄT)

■ Numbers in ○ are indicated REF.No. in the REPLACEMENT PARTS LIST

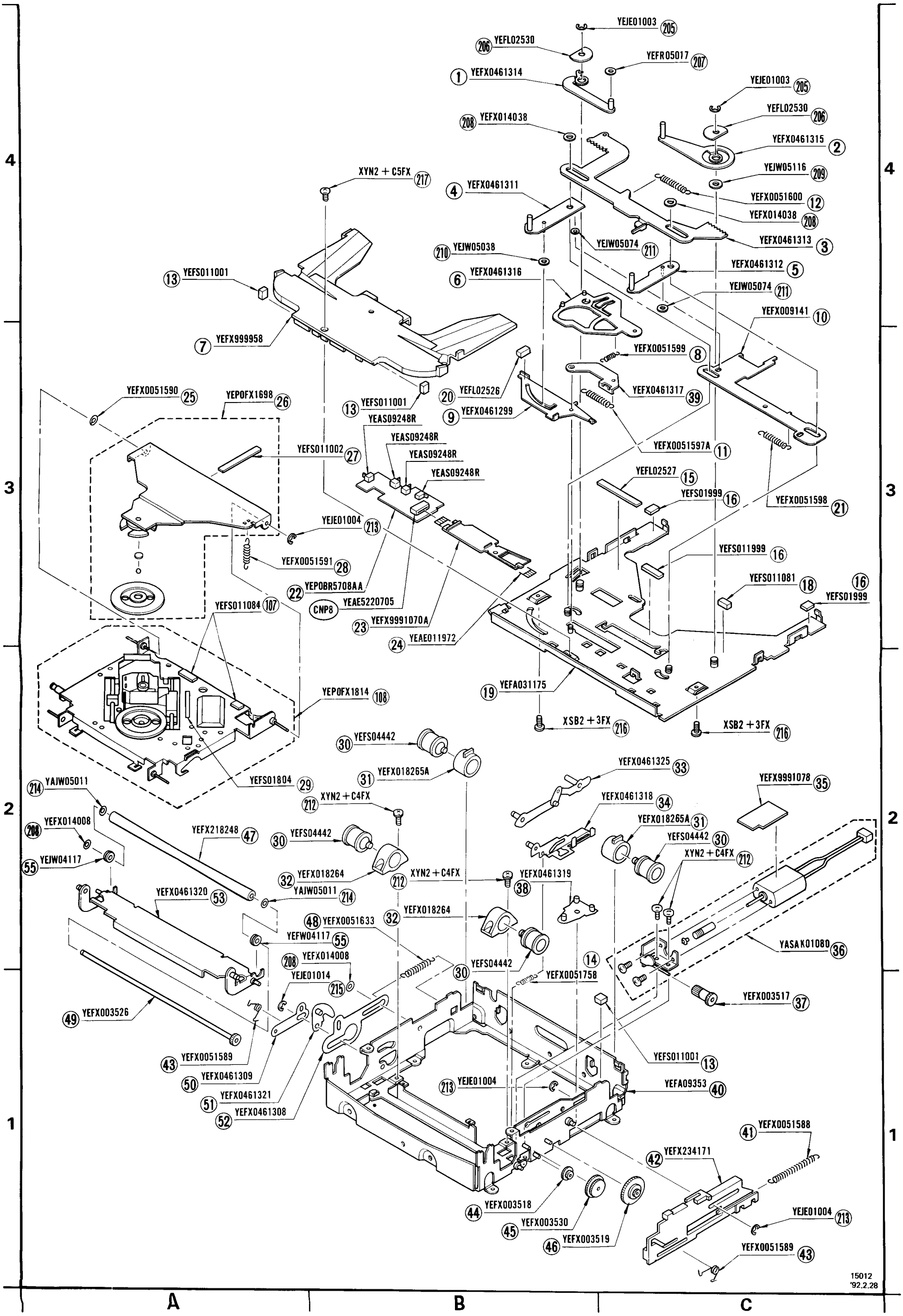
■ The symbols next to the screws indicate as follows.

32	⊙	YEJV08036	⊕Screw	
33	◆	XSB26 + 4FX	⊕Screw	2.6mmϕ × 4mm
34	✱	XSS5 + 6FX	⊕Screw	5mmϕ × 6mm
35	☆	XTB3 + 6FFX	⊕Screw	3mmϕ × 6mm
36	★	XTV2 + 6GFX	⊕Screw	2mmϕ × 6mm
37	※	XTB3 + 10FFX	⊕Screw	3mmϕ × 10mm
38	◘	YEJS05024	⊕Screw	



EXPLODED VIEW (CD DECK) / AUFGELÖTE DARSTELLUNGS (CD TONBAND GERÄT)

■ Numbers in ○ are indicated REF.No. in the REPLACEMENT PARTS LIST



EXPLODED VIEW (CD DECK) / AUFGELÖTE DARSTELLUNGS (CD TONBAND GERÄT)

■ Numbers in ○ are indicated REF.No. in the REPLACEMENT PARTS LIST

15012
'92.2.28

Ref. No.	Part No.	Part Code	Part Name & Description	Pcs set	Remarks
DIODEs					
[E6482] **MAIN BLOCK**					
D10	MA165		Diode	1	CQ-DP37VEG Only
D51	YEADRD56JS3		Diode	1	
D371	MA165		Diode	1	
D400	MA165		Diode	1	
D601	YEADDA118TX		Diode	1	CQ-DP37LEE Only
	MA151ATX			1	CQ-DP37VEG Only
D641	MA4100LM		Diode	1	
D720	MA700		Diode	1	
D721, 722	YEADDSM1A2T7		Diode	2	
D723	YEADRD56JS3		Diode	1	
D724	MA165		Diode	1	
D725	MA151ATX		Diode	1	
D727	MA151ATX		Diode	1	
D728	YEADRD91EB2T		Diode	1	
D729	YEAD11ES2		Diode	1	
D730	MA165		Diode	1	
D735	YEADRD51JS3T		Diode	1	
D801 to 804	MA151ATX		Diode	4	
D806	LN01201CQTA		LED	1	
[E2226A] **POWER BLOCK**					
D704, 705	YEAD11ES2		Diode	2	

Ref. No.	Part No.	Part Code	Part Name & Description	Pcs set	Remarks
CAPACITORs					
[E6482] **MAIN BLOCK**					
C10	YECUS1E104ZF		Ceramic, 0.1MFD 25WV	1	CQ-DP37VEG Only
C51	YECUS1H103KX		Ceramic, 0.01MFD 50WV	1	
C52	ECEA1AU221		Electrolytic AL, 220MFD 10WV	1	
C53	YECUS1H101JM		Ceramic, 100PF 50WV	1	
C54	ECEA1HKR22		Electrolytic AL, 0.22MFD 50WV	1	
C55	YECUS1H273KX		Ceramic, 0.027MFD 50WV	1	
C100	YECUS1H471JM		Ceramic, 470PF 50WV	1	
C101, 102	YECUS1E273KX		Ceramic, 0.027MFD 25WV	2	
C103	YECUS1E104ZF		Ceramic, 0.1MFD 25WV	1	
C104	YECUS1E223KX		Ceramic, 0.022MFD 25WV	1	
C106	YECUS1E104ZF		Ceramic, 0.1MFD 25WV	1	
C107	YECUS1H103KX		Ceramic, 0.01MFD 50WV	1	
C108	ECEA1AKS221		Electrolytic AL, 220MFD 10WV	1	
C109	YECUS1H103KX		Ceramic, 0.01MFD 50WV	1	
C200	YECSU1E104ZF		Ceramic, 0.1MFD 25WV	1	
C201	ECEA1AKS221		Electrolytic AL, 220MFD 10WV	1	
C210	ECEA1EK3R3		Electrolytic AL, 3.3MFD 25WV	1	
C211	YECUV2A102KX		Ceramic, 0.001MFD 100WV	1	
C212	ECEA0JKS330		Electrolytic AL, 33MFD 6.3WV	1	
C213, 214	ECQV1H124JM2		Polyester, 0.12MFD 50WV	2	
C215	YECUS1H102KX		Ceramic, 0.001MFD 50WV	1	
C216	ECEA0JKS330		Electrolytic AL, 33MFD 6.3WV	1	
C217, 218	ECQV1H124JM2		Polyester, 0.12MFD 50WV	2	
C219	ECEA1EK3R3		Electrolytic AL, 3.3MFD 25WV	1	
C251	YECUS1H272KX		Ceramic, 0.0027MFD 50WV	1	
C257	ECEA1CKS100		Electrolytic AL, 10MFD 16WV	1	
C271	ECEA1CKS100		Electrolytic AL, 10MFD 16WV	1	
C272	YECUS1H103KX		Ceramic, 0.01MFD 50WV	1	
C281	ECEA1HKS010		Electrolytic AL, 1MFD 50WV	1	
C283	ECEA1AKS470		Electrolytic AL, 47MFD 10WV	1	

Ref. No.	Part No.	Part Code	Part Name & Description	Pcs set	Remarks
C284	ECEA1HKS010		Electerolytic AL, 1MFD 50WV	1	
C285	YECUS1H331JM		Ceramic, 330PF 50WV	1	
C288	ECEA1AKS221		Electrolytic AL, 220MFD 10WV	1	
C290, 291	YECUS1H101JM		Ceramic, 100PF 50WV	2	
C300	ECEA1HKS2R2		Electrolytic AL, 2.2MFD 50WV	1	
C301	ECEA1AKS221		Electrolytic AL, 220MFD 10WV	1	
C302	ECEA1HK2R2		Electrolytic AL, 2.2MFD 50WV	1	
C310	ECEA1EK3R3		Electrolytic AL, 3.3MFD 25WV	1	
C312	ECEA0JKS330		Electrolytic AL, 33MFD 6.3WV	1	
C313	YECUS1H102KX		Ceramic, 0.001MFD 50WV	1	
C314	ECEA0JKS331Q		Electrolytic AL, 330MFD 6.3WV	1	
C315, 316	ECQV1H124JM2		Polyester, 0.12MFD 50WV	2	
C317	ECEA0JKS330		Electrolytic AL, 33MFD 6.3WV	1	
C318	YECUS1H102KX		Ceramic, 0.001MFD 50WV	1	
C319	ECEA0JKS331Q		Electrolytic AL, 330MFD 6.3WV	1	
C320	ECA1CUG222YB		Electrolytic AL, 2200MFD 16WV	1	
C321, 322	ECQV1H124JM2		Polyester, 0.12MFD 50WV	2	
C323	ECA1CUG222YB		Electrolytic AL, 2200MFD 16WV	1	
C324	ECEA1EK3R3		Electrolytic AL, 3.3MFD 25WV	1	
C351	YECUS1H272KX		Ceramic, 0.0027MFD 50WV	1	
C355	ECEA1CKS100		Electrolytic AL, 10MFD 16WV	1	
C371	ECEA1CKS100		Electrolytic AL, 10MFD 16WV	1	
C382	ECEA1AKS470		Electrolytic AL, 47MFD 10WV	1	
C383	ECEA1HKS010		Electrolytic AL, 1MFD 50WV	1	
C384	YECUS1H331JM		Ceramic, 330PF 50WV	1	
C387	ECEA1AKS470		Electreolytic AL, 47MFD 10WV	1	
C388	ECEA1HKS010		Electerolytic AL, 1MFD 50WV	1	
C392, 393	YECUV1H101JM		Ceramic, 100PF 50WV	2	
C401	YECUS1H270JM		Ceramic, 27PF 50WV	1	
C402, 403	ECEA1CKS100		Electrolytic AL, 10MFD 16WV	2	
C404	ECEA1HKS010		Electerolytic AL, 1MFD 50WV	1	
C405	ECEA1CKS100		Electrolytic AL, 10MFD 16WV	1	
C406	ECEA1HKS010		Electerolytic AL, 1MFD 50WV	1	
C407, 408	YECUS1C683KX		Ceramic, 0.068MFD 16WV	2	

Ref. No.	Part No.	Part Code	Part Name & Description	Pcs set	Remarks
C409, 410	YECUS1H332KX		Ceramic, 0.0033MFD 50WV	2	
C411	ECEA1CKS100		Electrolytic AL, 10MFD 16WV	1	
C412, 413	ECEA1HKSR33		Electrolytic AL, 0.22MFD 50WV	2	
C414	ECSF1CE105		Tantalum, 1MFD 16WV	1	
C415, 416	YECUS1C683KX		Ceramic, 0.068MFD 16WV	2	
C417	YECUS1H332KX		Ceramic, 0.0033MFD 50WV	1	
C418	ECEA1CKS100		Electrolytic AL, 10MFD 16WV	1	
C420	YECUS1H270JM		Ceramic, 27PF 50WV	1	
C421	YECUS1H332KX		Ceramic, 0.0033MFD 50WV	1	
C422, 423	ECEA1CKS100		Electrolytic AL, 10MFD 16WV	2	
C424	ECEA1HKS2R2		Electrolytic AL, 2.2MFD 50WV	1	
C425	ECEA1HKS2R2		Electrolytic AL, 2.2MFD 50WV	1	
C426	ECSF1CE106		Tantalum, 10MFD 16WV	1	
C427	ECEA1HKS010		Electerolytic AL, 1MFD 50WV	1	
C430	YECUS1H103KX		Ceramic, 0.01MFD 50WV	1	
C439, 440	YECUS1H270JM		Ceramic, 27MFD 50WV	2	
C500	YECUV2A103KX		Ceramic, 0.01MFD 100WV	1	
C501	YECUS1H103KX		Ceramic, 0.01MFD 50WV	1	
C502	ECEA0JKS331Q		Electrolytic AL, 330MFD 6.3WV	1	
C503	YECUS1H103KX		Ceramic, 0.01MFD 50WV	1	
C504, 505	YECUS1H050CM		Ceramic, 5PF 50WV	2	
C506	ECEA1AKS221		Electrolytic AL, 220MFD 10WV	1	
C507	YECUS1H103KX		Ceramic, 0.01MFD 50WV	1	
C508	YECUS1H102KX		Ceramic, 0.001MFD 50WV	1	
C551, 552	YECUS1H150JM		Ceramic, 15PF 50WV	2	
C553	ECEA1CKS100		Electrolytic AL, 10MFD 16WV	1	
C554	YECUS1H103KX		Ceramic, 0.01MFD 50WV	1	
C601	YECUS1H103KX		Ceramic, 0.01MFD 50WV	1	
C602	ECEA0JKS101		Electrolytic AL, 100MFD 6.3WV	1	
C603	YEECFYH0H223		Capacitor, 0.22FD 5WV	1	
C604 to 606	YECUS1H103KX		Ceramic, 0.01MFD 50WV	3	
C607	YECUS1H102KX		Ceramic, 0.001MFD 50WV	1	
C608	YECUS1H102KX		Ceramic, 0.001MFD 50WV	1	
C609, 610	YECUS1H102KX		Ceramic, 0.001MFD 50WV	2	

Ref. No.	Part No.	Part Code	Part Name & Description	Pcs set	Remarks
C611, 612	YECUV2A102KX		Ceramic, 0.001MFD 100WV	2	
C613	YECUS1H102KX		Ceramic, 0.001MFD 50WV	1	
C620, 621	YECUS1H220JM		Ceramic, 22PF 50WV	2	
C641	YECUS1H103KX		Ceramic, 0.01MFD 50WV	1	
C642	ECEA1VKS4R7		Electrolytic AL, 4.7MFD 35WV	1	
C643	ECEA1AKS101		Electrolytic AL, 100MFD 10WV	1	
C644, 645	YECUS1H103KX		Ceramic, 0.01MFD 50WV	2	
C670, 671	YECUS1H103KX		Ceramic, 0.01MFD 50WV	2	
C672	YECUS1H103KX		Ceramic, 0.01MFD 50WV	1	
C702	ECEA0JKS101		Electrolytic AL, 100MFD 6.3WV	1	
C703	ECEA1AKS470		Electrolytic AL, 47MFD 10WV	1	
C704	ECEA1CK101		Electrolytic AL, 100MFD 16WV	1	
C721, 722	ECEA1HKS010		Electerolytic AL, 1MFD 50WV	2	
C723	ECEA1AKS221		Electrolytic AL, 220MFD 10WV	1	
C724	ECEA1VKS4R7		Electrolytic AL, 4.7MFD 35WV	1	
C725	ECEA1CK101		Electrolytic AL, 100MFD 16WV	1	
C727	ECEA1CKS100		Electrolytic AL, 10MFD 16WV	1	
C728	ECEA0JKS101		Electrolytic AL, 100MFD 6.3WV	1	
C729	ECEA1CKS470		Electrolytic AL, 47MFD 16WV	1	
C730	ECEA1AKS101		Electrolytic AL, 100MFD 10WV	1	
C733	YECUS1H103KX		Ceramic, 0.01MFD 50WV	1	
C734	ECEA1CU222		Electrolytic AL, 2200MFD 16WV	1	
C735	ECEA1CU471		Electrolytic AL, 470MFD 16WV	1	
C736, 737	YECUS1H103KX		Ceramic, 0.01MFD 50WV	2	
C738	YECUS1H103KX		Ceramic, 0.01MFD 50WV	1	
C741	ECEA0JKS470		Electrolytic AL, 47MFD 6.3WV	1	
C742	YECUS1H103KX		Ceramic, 0.01MFD 50WV	1	
C743	YECUV2A103KX		Ceramic, 0.01MFD 100WV	1	
C744	ECEA1AKS101		Electrolytic AL, 100MFD 10WV	1	
C801	YECUS1H681JM		Ceramic, 680PF 50WV	1	
C970	YECUS1H101JM		Ceramic, 100PF 50WV	1	
C998	YEE05V103N		Ceramic, 0.01MFD 50WV	1	
C999	YEU05B101K		Ceramic, 100PF 50WV	1	

Ref. No.	Part No.	Part Code	Part Name & Description	Pcs set	Remarks
[E2226A]			**POWER BLOCK**		
C712, 713	ECEA1CU101		Electrolytic AL, 100MFD 16WV	2	
LC701, 702	YECCL55S222T		Shild through Capacitor	2	
[E5541]			**RDS BLOCK**		**CQ-DP37VEG ONLY**
C401, 402	ECQV1H683JZ		Polyester, 0.068MFD 50WV	2	
C403	ECEA1EK4R7		Electrolytic AL, 4.7MFD 25WV	1	
C404, 405	ECQV1H683JZ		Polyester, 0.068MFD 50WV	2	
C406	YECUS1C563KX		Ceramic, 0.056MFD 16WV	1	
C407	YECUS1E104ZF		Ceramic, 0.1MFD 25WV	1	
C408	YECUS1C563KX		Ceramic, 0.056MFD 16WV	1	
C409, 410	ECQV1H683JZ		Polyester, 0.068MFD 50WV	2	
			RESISTORs		
[E6482]			**MAIN BLOCK**		
R10 to 12	ERJ6GEYJ103		Metal Coat, 10K ohms 0.1W	3	CQ-DP37VEG Only
R13, 14	ERJ6GEYJ153		Metal Coat, 15K ohms 0.1W	2	CQ-DP37VEG Only
R52	ERJ8GCYJ103		Metal Coat, 10K ohms 0.13W	1	
R53	ERJ6GEYJ103		Metal Coat, 10K ohms 0.1W	1	
R54	ERJ6GEYJ392		Metal Coat, 3.9K ohms 0.1W	1	
R57	ERJ6GEYJ393		Metal Coat, 39K ohms 0.1W	1	
R58	ERD25TJ472		Carbon, 4.7K ohms 0.25W	1	
R59	ERJ6GEYJ473		Metal Coat, 47K ohms 0.1W	1	
R100	ERJ6GEYJ274		Metal Coat, 270K ohms 0.1W	1	
R101	ERD25TJ101		Carbon, 100 ohms 0.25W	1	
R102	ERJ6GEYJ273		Metal Coat, 27K ohms 0.1W	1	
R103	ERJ6GEYJ393		Metal Coat, 39K ohms 0.1W	1	
R104	ERJ6GEYJ823		Metal Coat, 82K ohms 0.1W	1	

Ref. No.	Part No.	Part Code	Part Name & Description	Pcs set	Remarks
R105	ERJ6GEYJ393		Metal Coat, 39K ohms 0.1W	1	
R106, 107	ERJ6GEYJ393		Metal Coat, 39K ohms 0.1W	2	
R109	ERJ6GEYJ562		Metal Coat, 5.6K ohms 0.1W	1	
R110	ERJ8GCYJ103		Metal Coat, 10K ohms 0.13W	1	
R111	ERJ6GEYJ153		Metal Coat, 15K ohms 0.1W	1	
R112	ERJ6GEYJ153		Metal Coat, 15K ohms 0.1W	1	
R113	ERJ6GEYJ393		Metal Coat, 39K ohms 0.1W	1	
R114	ERJ8GCYJ153		Metal Coat, 15K ohms 0.13W	1	
R200	ERJ6GEYJ103		Metal Coat, 10K ohms 0.1W	1	
R201	ERJ6GEYJ222		Metal Coat, 2.2K ohms 0.1W	1	
R202	ERJ6GEYJ562		Metal Coat, 5.6K ohms 0.1W	1	
R203	ERJ6GEYJ222		Metal Coat, 2.2K ohms 0.1W	1	
R204	ERJ6GEYJ562		Metal Coat, 5.6K ohms 0.1W	1	
R210	ERJ6GEYJ224		Metal Coat, 220K ohms 0.1W	1	
R211	ERJ6GEYJ471		Metal Coat, 470 ohms 0.1W	1	
R212, 213	ERJ8GCYJ2R2		Metal Coat, 2.2 ohms 0.13W	2	
R214	ERJ6GEYJ224		Metal Coat, 220K ohms 0.1W	1	
R215	ERJ6GEYJ471		Metal Coat, 470 ohms 0.1W	1	
R216, 217	ERJ8GCYJ2R2		Metal Coat, 2.2 ohms 0.13W	2	
R251	ERJ8GCYJ102		Metal Coat, 1K ohms 0.13W	1	
R252	ERJ6GEYJ102		Metal Coat, 1K ohms 0.1W	1	
R253	ERJ6GEYJ821		Metal Coat, 820 ohms 0.1W	1	
R272	ERDS2TJ102		Carbon, 1K ohms 0.25W	1	
R273	ERJ8GCYJ393		Metal Coat, 39K ohms 0.13W	1	
R274	ERJ6GEYJ393		Metal Coat, 39K ohms 0.1W	1	
R281	ERJ8GCYJ103		Metal Coat, 10K ohms 0.13W	1	
R283	ERJ6GEYJ562		Metal Coat, 5.6K ohms 0.1W	1	
R284	ERJ8GCYJ561		Metal Coat, 560 ohms 0.13W	1	
R285	ERJ6GEYJ102		Metal Coat, 1K ohms 0.1W	1	
R289	ERJ6GEYJ104		Metal Coat, 100K ohms 0.1W	1	
R290	ERJ6GEYJ823		Metal Coat, 82K ohms 0.1W	1	
R291	ERJ6GEYJ473		Metal Coat, 47K ohms 0.1W	1	
R295	ERJ6GEYJ222		Metal Coat, 2.2K ohms 0.1W	1	
R300	ERJ6GEYJ272		Metal Coat, 2.7K ohms 0.1W	1	

Ref. No.	Part No.	Part Code	Part Name & Description	Pcs set	Remarks
R301	ERJ6GEYJ103		Metal Coat, 10K ohms 0.1W	1	
R302	ERJ6GEYJ822		Metal Coat, 8.2K ohms 0.1W	1	
R303	ERJ8GCYJ472		Metal Coat, 4.7K ohms 0.13W	1	
R304	ERJ6GEYJ272		Metal Coat, 2.7K ohms 0.1W	1	
R305	ERJ6GEYJ222		Metal Coat, 2.2K ohms 0.1W	1	
R306	ERJ6GEYJ562		Metal Coat, 5.6K ohms 0.1W	1	
R307	ERJ6GEYJ222		Metal Coat, 2.2K ohms 0.1W	1	
R308	ERJ6GEYJ562		Metal Coat, 5.6K ohms 0.1W	1	
R311	ERJ6GEYJ224		Metal Coat, 220K ohms 0.1W	1	
R312	ERJ6GEYJ471		Metal Coat, 470 ohms 0.1W	1	
R313, 314	ERJ8GCYJ2R2		Metal Coat, 2.2 ohms 0.13W	2	
R315	ERJ6GEYJ224		Metal Coat, 220K ohms 0.1W	1	
R316	ERJ6GEYJ471		Metal Coat, 470 ohms 0.1W	1	
R317, 318	ERJ8GCYJ2R2		Metal Coat, 2.2 ohms 0.13W	2	
R351	ERJ8GCYJ102		Metal Coat, 1K ohms 0.13W	1	
R352	ERJ6GEYJ102		Metal Coat, 1K ohms 0.1W	1	
R353	ERJ6GEYJ821		Metal Coat, 820 ohms 0.1W	1	
R371	ERJ8GCYJ393		Metal Coat, 39K ohms 0.13W	1	
R372	ERJ6GEYJ393		Metal Coat, 39K ohms 0.1W	1	
R373	ERJ6GEYJ102		Metal Coat, 1K ohms 0.1W	1	
R375	ERJ6GEYJ393		Metal Coat, 39K ohms 0.1W	1	
R377	ERJ8GEYJ393		Metal Coat, 39K ohms 0.13W	1	
R381	ERJ6GEYJ103		Metal Coat, 10K ohms 0.1W	1	
R383	ERJ6GEYJ102		Metal Coat, 1K ohms 0.1W	1	
R384	ERJ6GEYJ562		Metal Coat, 5.6K ohms 0.1W	1	
R385	ERJ6GEYJ104		Metal Coat, 100K ohms 0.1W	1	
R388	ERJ6GEYJ104		Metal Coat, 100K ohms 0.1W	1	
R390	ERJ8GEYJ473		Metal Coat, 47K ohms 0.13W	1	
R391	ERJ8GCYJ561		Metal Coat, 560 ohms 0.13W	1	
R393	ERJ6GEYJ222		Metal Coat, 2.2K ohms 0.1W	1	
R400, 401	ERJ6GEYJ103		Metal Coat, 10K ohms 0.1W	2	
R404, 405	ERJ6GEYJ105		Metal Coat, 1M ohms 0.1W	2	
R406	ERJ6GEYJ103		Metal Coat, 10K ohms 0.1W	1	
R407	ERJ6GEYJ152		Metal Coat, 1.5K ohms 0.1W	1	

Ref. No.	Part No.	Part Code	Part Name & Description	Pcs set	Remarks
R408, 409	ERJ6GEYJ105		Metal Coat, 1M ohms 0.1W	2	
R410	ERJ6GEYJ103		Metal Coat, 10K ohms 0.1W	1	
R411	ERJ6GEYJ105		Metal Coat, 1M ohms 0.1W	1	
R412, 413	ERD25TJ222		Carbon, 2.2K ohms 0.25W	2	
R414	ERJ6GEYJ222		Metal Coat, 2.2K ohms 0.1W	1	
R415	ERJ6GEYJ101		Metal Coat, 100 ohms 0.1W	1	
R417, 418	ERJ6GEYJ103		Metal Coat, 10K ohms 0.1W	2	
R419, 420	ERJ6GEYJ272		Metal Coat, 2.7K ohms 0.1W	2	
R421	ERJ6GEYJ105		Metal Coat, 1M ohms 0.1W	1	
R422	ERJ6GEYJ103		Metal Coat, 10K ohms 0.1W	1	
R423	ERJ6GEYJ152		Metal Coat, 1.5K ohms 0.1W	1	
R424, 425	ERJ6GEYJ105		Metal Coat, 1M ohms 0.1W	2	
R426, 427	ERJ6GEYJ105		Metal Coat, 1M ohms 0.1W	2	
R428	ERJ6GEYJ103		Metal Coat, 10K ohms 0.1W	1	
R429	ERDS2TJ104		Carbon, 100K ohms 0.25W	1	
R430	ERD25TJ103		Carbon, 10K ohms 0.25W	1	
R431	ERJ8GCYJ103		Metal Coat, 10K ohms 0.13W	1	
R440	ERD25TJ103		Carbon, 10K ohms 0.25W	1	
R441	ERJ6GEYJ103		Metal coat, 10K ohms 0.1W	1	
R501, 502	ERJ8GCYJ470		Metal Coat, 47 ohms 0.13W	2	
R503	ERJ6GEYJ470		Metal Coat, 47 ohms 0.1W	1	
R504	ERJ8GCYJ470		Metal Coat, 47 ohms 0.13W	1	
R505	ERJ8GCYJ473		Metal Coat, 47K ohms 0.13W	1	
R506, 507	ERJ6GEYJ473		Metal Coat, 47K ohms 0.1W	2	
R508	ERJ6GEYJ470		Metal Coat, 47 ohms 0.1W	1	
R509	ERJ6GEYJ100		Metal Coat, 10 ohms 0.1W	1	
R510	ERJ12YJ391H		Carbon, 390 ohms 0.25W	1	
R511	ERJ6GEYJ473		Metal Coat, 47K ohms 0.1W	1	
R551, 552	ERJ6GEYJ103		Metal Coat, 10K ohms 0.1W	2	
R553	ERJ6GEYJ103		Metal Coat, 10K ohms 0.1W	1	
R554	ERJ6GEYJ472		Metal Coat, 4.7K ohms 0.1W	1	
R601, 602	ERJ6GEYJ472		Metal Coat, 4.7K ohms 0.1W	2	
R603, 604	ERJ6GEYJ472		Metal Coat, 4.7K ohms 0.1W	2	
R605, 606	ERJ6GEYJ472		Metal Coat, 4.7K ohms 0.1W	2	

Ref. No.	Part No.	Part Code	Part Name & Description	Pcs set	Remarks
R607	ERJ8GCYJ681		Metal Coat, 680 ohms 0.13W	1	
R608	ERJ6GEYJ104		Metal Coat, 100K ohms 0.1W	1	
R641	ERDS2TJ472		Carbon, 4.7K ohms 0.25W	1	
R642, 643	ERJ6GEYJ152		Metal Coat, 1.5K ohms 0.1W	2	
R644	ERJ6GEYJ471		Metal Coat, 470 ohms 0.1W	1	
R645	ERD25TJ181		Carbon, 180 ohms 0.25W	1	
R646	ERJ6GEYJ152		Metal Coat, 1.5K ohms 0.1W	1	
R650	ERJ6GEYJ104		Metal Coat, 100K ohms 0.1W	1	
R651	ERJ6GEYJ103		Metal Coat, 10K ohms 0.1W	1	
R652	ERJ6GEYJ331		Metal Coat, 330 ohms 0.1W	1	
R653	ERJ6GEYJ103		Metal Coat, 10K ohms 0.1W	1	
R670	ERJ6GEYJ472		Metal Coat, 4.7K ohms 0.1W	1	
R671	ERJ6GEYJ222		Metal Coat, 2.2K ohms 0.1W	1	
R700, 701	ERJ6GEYJ103		Metal Coat, 10K ohms 0.1W	2	
R702	ERG1SJ102		Carbon, 1K ohms 1W	1	
R703	ERJ6GEYJ473		Metal Coat, 47K ohms 0.1W	1	
R720	ERJ6GEYJ102		Metal Coat, 1K ohms 0.1W	1	
R721	ERJ8GCYJ824		Metal Coat, 820K ohms 0.13W	1	
R722	ERJ8GCYJ334		Metal Coat, 330K ohms 0.13W	1	
R723	ERJ6GEYJ563		Metal Coat, 56K ohms 0.1W	1	
R724	ERJ6GEYJ470		Metal Coat, 47 ohms 0.1W	1	
R726	ERJ8GCYJ334		Metal Coat, 330K ohms 0.13W	1	
R727	ERJ6GEYJ470		Metal Coat, 47 ohms 0.1W	1	
R728	ERJ6GEYJ103		Metal Coat, 10K ohms 0.1W	1	
R730	ERDS1FJ2R7		Carbon, 2.7 ohms 0.5W	1	
R731	ERDS1FJ3R9		Carbon, 3.9 ohms 0.5W	1	
R732	ERD25TJ1R2		Carbon, 1.2 ohms 0.25W	1	
R733	ERDS2TJ102		Carbon, 1K ohms 0.25W	1	
R736	ERJ6GEYJ102		Metal Coat, 1K ohms 0.1W	1	
R737	ERJ6GEYJ103		Metal Coat, 10K ohms 0.1W	1	
R738	ERJ6GEYJ102		Metal Coat, 1K ohms 0.1W	1	
R739	ERX1SJ2R7		Carbon, 2.7 ohms 1W	1	
R740	ERJ6GEYJ472		Metal Coat, 4.7K ohms 0.1W	1	
R741	ERJ6GEYJ273		Metal Coat, 27K ohms 0.1W	1	

Ref. No.	Part No.	Part Code	Part Name & Description	Pcs set	Remarks
R742	ERJ6GEYJ561		Metal Coat, 560 ohms 0.1W	1	
R743	ERJ6GEYJ473		Metal Coat, 47K ohms 0.1W	1	
R745	ERD25FJ1R0		Carbon, 1 ohm 0.25W	1	
R746	ERJ6GEYJ103		Metal Coat, 10K ohms 0.1W	1	
R747	ERJ8GCYJ103		Metal Coat, 10K ohms 0.13W	1	
R748	ERJ6GEYJ103		Metal Coat, 10K ohms 0.1W	1	
R749	ERDS2TJ102		Carbon, 1K ohms 0.25W	1	
R750	ERJ8GCYJ102		Metal Coat, 1K ohms 0.13W	1	
R751	ERJ12YJ391H		Carbon, 390 ohms 0.5W	1	
R752	ERJ8GCYJ824		Metal Coat, 820K ohms 0.13W	1	
R753	ERDS2TJ102		Carbon, 1K ohms 0.25W	1	
R754	ERJ6GEYJ563		Metal Coat, 56K ohms 0.1W	1	
R808	ERJ8GCYJ105		Metal Coat, 1M ohms 0.13W	1	

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RDS BLOCK **CQ-DP37VEG ONLY**

R401	ERJ6GEYJ473		Metal Coat, 47K ohms 0.1W	1	
R402	ERJ6GEYJ394		Metal Coat, 390K ohms 0.1W	1	
R403	ERJ6GEYJ563		Metal Coat, 56K ohms 0.1W	1	
R404	ERJ6GEYJ683		Metal Coat, 68K ohms 0.1W	1	
R405	ER0S2TKF5110		Carbon, 511 ohms 0.25W	1	
R406	ERJ6GEYJ104		Metal Coat, 100K ohms 0.1W	1	
R407	ER0S2TKF6813		Carbon, 681K ohms 0.25W	1	
R408	ERJ6GEYJ393		Metal Coat, 39K ohms 0.1W	1	
R409	ERJ6GEYJ224		Metal Coat, 220K ohms 0.1W	1	
R410	ERJ6GEYJ472		Metal Coat, 4.7K ohms 0.1W	1	
R411	ERJ8GCYJ124		Metal Coat, 120K ohms 0.13W	1	
R412	ERJ6GEYJ223		Metal Coat, 22K ohms 0.1W	1	
R413	ERJ6GEYJ394		Metal Coat, 390K ohms 0.1W	1	
R414	ERJ6GEYJ103		Metal Coat, 10K ohms 0.1W	1	
R415	ERJ6GEYJ473		Metal Coat, 47K ohms 0.1W	1	
R416	ERJ6GEYJ184		Metal Coat, 180K ohms 0.1W	1	
R417	ERJ6GEYJ183		Metal Coat, 18K ohms 0.1W	1	

Ref. No.	Part No.	Part Code	Part Name & Description	Pcs set	Remarks
SWITCHs					
SW700	YEAS07169		Battery ON/OFF	1	
SW801 to 812	YEAS09252		Preset	12	
SW814 to 822	YEAS09252		Preset	9	
CRYSTALs					
XL501	YEXLCSA338MX		Crystal	1	
XL550	YEXL49U07200		Crystal	1	
XL601	YEXL49U0419T		Crystal	1	
COILs					
L101	YELT02C4R7KT		RF Coil	1	
L401	YELL07S175		OSC Coil	1	CQ-DP37VEG Only
L501	ELC08D050		Choke Coil	1	
L502 to 504	YELTBLM21A05		RF Coil	3	CQ-DP37VEG Only
L505	ELEH102KA		RF Coil	1	
L701	YETQ020F105		Choke Coil	1	
L702	YETQ026F090		Choke Coil	1	
LCD					
LCD1	YEXDCM1056		LCD	1	CQ-DP37VEG Only
	YEXDCM1055			1	CQ-DP37LEE Only

Ref. No.	Part No.	Part Code	Part Name & Description	Pcs set	Remarks
PRINTING					
	YEFM281995		Operating Instruction	1	CQ-DP37VEG Only
	YEFM281996			1	CQ-DP37LEE Only
INST PARTS					
	YEFG04019		Rear Support Strap	1	
	XNG5AFX		Hex, Nut (5mmϕ)	2	
	XVG5C25FX		Hex, Bolt (5mmϕ × 25mm)	1	
	YEJV01060		Mounting Bolt (5mmϕ)	1	
	XWA5BFX		Spring Washer (5mmϕ)	2	
	XWC5CFX		Toothend Lock Washer	1	
	XWG5FX		Plain Washer	2	

Ref. No.	Part No.	Part Code	Part Name & Description	Pcs set	Remarks
CD PLAYER PARTS					FD15012 92.1.14
ELECTRICITY PART					
CN601	YEAE5220712		12P Connector	1	
CN602	YEAE5227106		6P Connector	1	
CN603	YEAE5220704		4P Connector	1	
CN802	YEAE5227105		5P Connector	1	
CN803	YEAE5326102		2P Connector	1	
CNP1	YEAE0124TKCD		24P Connector	1	
CNP8	YEAE5220705		5P Connector	1	
1	YEP0BR5843AA		PCB w/Component	1	NLA
2	YEP0BR5708AA		PCB w/Component	1	NLA
ICs AND TRANSISTORs					
IC101	YEAMC2570G		IC	1	
IC451	YEAMD6375G		IC	1	
IC480	YEAMTLL05PSM		IC	1	
IC602	YEAM75112828		IC	1	
IC603	YEAMBA6219BF		IC	1	
IC805	YEAMD6374501		IC	1	
IC903, 904	YEAMD16808G		IC	2	
IC905	MN4071BST1		IC	1	
IC906	YEAMPC4574T1		IC	1	
IC907	YEAMTA8406F		IC	1	
IC908	YEAMTA8406F		IC	1	
Q101	2SB956TX		Transistor	1	
Q480	2SB956TX		Transistor	1	

Ref. No.	Part No.	Part Code	Part Name & Description	Pcs set	Remarks
			DIODEs		
D610	MA151WK		Diode	1	
D620	MA151WK		Diode	1	
D630	MA151WK		Diode	1	
			CAPACITORs		
C105	YECUS1E104ZF		Ceramic, 0.1MFD 25WV	1	
C107	YECUS1H221JM		Ceramic, 220PF 50WV	1	
C108	YECUS1H103KX		Ceramic, 0.01MFD 50WV	1	
C109	YECUS1H221JM		Ceramic, 220PF 50WV	1	
C110	YECSV0JT476R		Tantalum, 47MFD 6WV	1	
C111, 112	YECUV1C224KX		Ceramic, 0.22MFD 16WV	2	
C113, 114	YECUV1C224KX		Ceramic, 0.22MFD 16WV	2	
C115	YECUS1E273KX		Ceramic, 0.027MFD 25WV	1	
C116	YECUS1C224ZF		Ceramic, 0.22MFD 16WV	1	
C117	YECUS1E104ZF		Ceramic, 0.1MFD 25WV	1	
C118	ECEV1CV470SP		Electrolytic AL, 47MFD 16WV	1	
C119	YECUS1H181JM		Ceramic, 180PF 50WV	1	
C120	YECUS1H102KX		Ceramic, 0.001MFD 50WV	1	
C121	YECUS1H561JM		Ceramic, 560PF 50WV	1	
C122	YECUS1H102KX		Ceramic, 0.001MFD 50WV	1	
C123	YECUS1H680JM		Ceramic, 68PF 50WV	1	
C124	YECUS1H102KX		Ceramic, 0.001MFD 50WV	1	
C128	YECUS1E104ZF		Ceramic, 0.1MFD 25WV	1	
C150	YECUS1H102KX		Ceramic, 0.001MFD 50WV	1	
C152	YECUS1H102KX		Ceramic, 0.001MFD 50WV	1	
C154	YECUS1H102KX		Ceramic, 0.001MFD 50WV	1	
C451	ECEV1CV470SP		Electrolytic AL, 47MFD 16WV	1	
C452	YECUS1E104ZF		Ceramic, 0.1MFD 25WV	1	
C480, 481	YECUS1C224ZF		Ceramic, 0.22MFD 16WV	2	
C601, 602	YECUS1E104ZF		Ceramic, 0.1MFD 25WV	2	

Ref. No.	Part No.	Part Code	Part Name & Description	Pcs set	Remarks
C603, 604	YECUS1H330JM		Ceramic, 33PF 50WV	2	
C605	YECUS1H103KX		Ceramic, 0.01MFD 50WV	1	
C671	ECEV1CV470SP		Electrolytic AL, 47MFD 16WV	1	
C815	YECUS1E104ZF		Ceramic, 0.1MFD 25WV	1	
C819	YECUS1H221JC		Ceramic, 220PF 50WV	1	
C820	ECGC0KA8R2R		Electrolytic AL, 8.2MFD 8WV	1	
C821	ECEV1CV470SP		Electrolytic AL, 47MFD 16WV	1	
C822	YECUS1E104ZF		Ceramic, 0.1MFD 25WV	1	
C823, 824	YECUS1C104KX		Ceramic, 0.1MFD 16WV	2	
C825	YECUS1H102KX		Ceramic, 0.001MFD 50WV	1	
C826	YECUS1E104ZF		Ceramic, 0.1MFD 25WV	1	
C882	YECUS1E104ZF		Ceramic, 0.1MFD 25WV	1	
C910	ECEV1CV470SP		Electrolytic AL, 47MFD 16WV	1	
C911, 912	YECUS1H103KX		Ceramic, 0.01MFD 50WV	2	
C913	YECUS1H103KX		Ceramic, 0.01MFD 50WV	1	
C914	ECEV1CV470SP		Electrolytic AL, 47MFD 16WV	1	
C915, 917	YECUS1E104ZF		Ceramic, 0.1MFD 25WV	2	
C920	YECUS1H103KX		Ceramic, 0.01MFD 50WV	1	
C931, 932	YECUS1H103KX		Ceramic, 0.01MFD 50WV	2	
C933	YECUS1H103KX		Ceramic, 0.01MFD 50WV	1	
C934	ECEV1CV470SP		Electrolytic AL, 47MFD 16WV	1	
C935	YECUS1E104ZF		Ceramic, 0.1MFD 25WV	1	
C937	YECUS1E104ZF		Ceramic, 0.1MFD 25WV	1	
C941	ECEV1CV100SR		Electrolytic AL, 10MFD 16WV	1	
C942, 943	YECUS1H390JM		Ceramic, 39PF 50WV	2	
C944	YECUS1H271JM		Ceramic, 270PF 50WV	1	
C945	YECUS1H680JM		Ceramic, 68PF 50WV	1	
C948	YECUS1H100CC		Ceramic, 100PF 50WV	1	
C949	YECUS1H103KX		Ceramic, 0.01MFD 50WV	1	
C950	ECEV1CV470SP		Electrolytic AL, 47MFD 16WV	1	
C951	YECUS1H220JM		Ceramic, 22PF 50WV	1	
C952	YECUS1H103KX		Ceramic, 0.01MFD 50WV	1	
C953	ECEV1CV470SP		Electrolytic AL, 47MFD 16WV	1	
C954, 955	YECUS1H390JM		Ceramic, 39PF 50WV	2	

Ref. No.	Part No.	Part Code	Part Name & Description	Pcs set	Remarks
C960	ECEV1CV100SR		Electrolytic AL, 10MFD 16WV	1	
C997	YECUS1H102KX		Ceramic, 0.001MFD 50WV	1	
C998, 999	YECUS1H102KX		Ceramic, 0.001MFD 50WV	2	
			RESISTORs		
R108	ERJ3GEYJ562V		Metal Coat, 5.6K ohms 0.63W	1	
R109	ERJ3GEYJ182V		Metal Coat, 1.8K ohms 0.63W	1	
R111	ERJ14YJ100H		Carbon, 10 ohms 0.25W	1	
R114	ERJ3GEYJ103V		Metal Coat, 10K ohms 0.63W	1	
R115	ERJ3GEYJ562V		Metal Coat, 5.6K ohms 0.63W	1	
R116	ERJ3GEYJ223V		Metal Coat, 22K ohms 0.63W	1	
R117	ERJ3GEYJ222V		Metal Coat, 2.2K ohms 0.63W	1	
R119	ERJ3GEYJ823V		Metal Coat, 82K ohms 0.63W	1	
R120	ERJ3GEYJ684V		Metal Coat, 680K ohms 0.63W	1	
R124	ERJ6GEYJ123V		Metal Coat, 12K ohms 0.63W	1	
R128, 129	ERJ3GEYJ123V		Metal Coat, 12K ohms 0.63W	2	
R132	ERJ3GEYJ472V		Metal Coat, 4.7K ohms 0.63W	1	
R134	ERJ3GEYJ684V		Metal Coat, 680K ohms 0.63W	1	
R135, 136	ERJ3GEYJ123V		Metal Coat, 12K ohms 0.63W	2	
R138	ERJ3GEYJ122V		Metal Coat, 1.2K ohms 0.63W	1	
R139	ERJ3GEYJ223V		Metal Coat, 22K ohms 0.63W	1	
R140	ERJ3GEYJ391V		Metal Coat, 390 ohms 0.63W	1	
R143	ERJ3GEYJ223V		Metal Coat, 22K ohms 0.63W	1	
R148	ERJ3GEYJ101V		Metal Coat, 100 ohms 0.63W	1	
R198, 199	ERJ3GEYJ101V		Metal Coat, 100 ohms 0.63W	2	
R451	ERJ3GEYJ471V		Metal Coat, 470K ohms 0.63W	1	
R452	ERJ3GEYJ473V		Metal Coat, 47K ohms 0.63W	1	
R480	ERJ14YJ4R7H		Carbon, 4.7 ohms 0.25W	1	
R605, 606	ERJ12YJ3R9H		Carbon, 3.9 ohms 0.5W	2	
R612	ERJ3GEYJ103V		Metal Coat, 10K ohms 0.63W	1	
R620, 621	ERJ3GEYJ473V		Metal Coat, 47K ohms 0.63W	2	
R622	ERJ3GEYJ473V		Metal Coat, 47K ohms 0.63W	1	

Ref. No.	Part No.	Part Code	Part Name & Description	Pcs set	Remarks
R623	ERJ3GEYJ104V		Metal Coat, 100K ohms 0.63W	1	
R627	ERJ3GEYJ472V		Metal Coat, 4.7K ohms 0.63W	1	
R628	ERJ3GEYJ104V		Metal Coat, 100K ohms 0.63W	1	
R629, 630	ERJ3GEYJ472V		Metal Coat, 4.7K ohms 0.63W	2	
R631, 632	ERJ3GEYJ472V		Metal Coat, 4.7K ohms 0.63W	2	
R636	ERJ3GEYJ223V		Metal Coat, 22K ohms 0.63W	1	
R637	ERJ3GEYJ103V		Metal Coat, 10K ohms 0.63W	1	
R638	ERJ3GEYJ223V		Metal Coat, 22K ohms 0.63W	1	
R641	ERJ3GEYJ563V		Metal Coat, 56K ohms 0.63W	1	
R644	ERJ3GEYJ103V		Metal Coat, 10K ohms 0.63W	1	
R646	ERJ3GEYJ473V		Metal Coat, 47K ohms 0.63W	1	
R667	ERJ3GEYJ563V		Metal Coat, 56K ohms 0.63W	1	
R825	ERJ3GEYJ332V		Metal Coat, 3.3K ohms 0.63W	1	
R826	ERJ3GEYJ473V		Metal Coat, 47K ohms 0.63W	1	
R853, 854	ERJ3GEYJ153V		Metal Coat, 15K ohms 0.63W	2	
R901, 902	ERJ3GEYJ103V		Metal Coat, 10K ohms 0.63W	2	
R903	ERJ3GEYJ184V		Metal Coat, 180K ohms 0.63W	1	
R904	ERJ3GEYJ104V		Metal Coat, 100K ohms 0.63W	1	
R905	ERJ3GEYJ184V		Metal Coat, 180K ohms 0.63W	1	
R906	ERJ3GEYJ104V		Metal Coat, 100K ohms 0.63W	1	
R907	ERJ3GEYJ184V		Metal Coat, 180K ohms 0.63W	1	
R908	ERJ3GEYJ104V		Metal Coat, 100K ohms 0.63W	1	
R909	ERJ3GEYJ184V		Metal Coat, 180K ohms 0.63W	1	
R910	ERJ3GEYJ104V		Metal Coat, 100K ohms 0.63W	1	
R911, 912	ERJ3GEYJ473V		Metal Coat, 47K ohms 0.63W	2	
R913	ERJ3GEYJ104V		Metal Coat, 100K ohms 0.63W	1	
R915	ERJ3GEYJ563V		Metal Coat, 56K ohms 0.63W	1	
R916	ERJ3GEYJ104V		Metal Coat, 100K ohms 0.63W	1	
R917	ERJ3GEYJ333V		Metal Coat, 33K ohms 0.63W	1	
R918, 919	ERJ3GEYJ104V		Metal Coat, 100K ohms 0.63W	2	
R920	ERJ3GEYJ473V		Metal Coat, 47K ohms 0.63W	1	
R921	ERJ3GEYJ104V		Metal Coat, 100K ohms 0.63W	1	
R922	ERJ3GEYJ473V		Metal Coat, 47K ohms 0.63W	1	
R924	ERJ3GEYJ333V		Metal Coat, 33K ohms 0.63W	1	

Ref. No.	Part No.	Part Code	Part Name & Description	Pcs set	Remarks
R955, 956	ERJ3GEYJ104V		Metal Coat, 100K ohms 0.63W	2	
R957	ERJ3GEYJ473V		Metal Coat, 47K ohms 0.63W	1	
R971, 972	ERJ3GEYJ104V		Metal Coat, 100K ohms 0.63W	2	
R973, 974	ERJ3GEYJ104V		Metal Coat, 100K ohms 0.63W	2	
R998, 999	ERJ3GEYJ103V		Metal Coat, 10K ohms 0.63W	2	
VARIABLE RESISTORs					
VR101	YEVN031B203M		20K ohms	1	
VR102	YEVN031B503M		50K ohms	1	
VR103	YEVN031B203M		20K ohms	1	
VR104	YEVN031B103M		10K ohms	1	
VR105	YEVN031B303M		30K ohms	1	
VR106	YEVN031B103M		10K ohms	1	
VR107	YEVN031B202M		2K ohms	1	
CRYSTAL					
XL501	YEXLCSAC419M		Crystal	1	
COILs					
L101	YELT03N5R6KT		RF Coil	1	
SWITCH					
SW1 to 4	YEAS09248R			4	

Ref. No.	Part No.	Part Code	Part Name & Description	Pcs set	Remarks
MISCELLANEOUS					
SW1 to 4	YEAS09248R		Switch	4	
CNP8	YEAE5220705		5P Connector	1	
1 (4-B)	YEFX0461314A		Position Detect, Lever (R)	1	
2 (4-C)	YEFX0461315A		Position Detect, Lever (L)	1	
3 (4-C)	YEFX0461313		Gear Lever Assy	1	
4 (4-B)	YEFX0461311A		Disc Lock Lever (RA)	1	
5 (4-C)	YEFX0461312A		Disc Lock Lever (LA)	1	
6 (4-B)	YEFX0461316		Cam Lever Assy	1	
7 (3-A)	YEFX999958A		Disc Guide (u)	1	
8 (3-C)	YEFX0051599		Cam Lever Spring	1	
9 (3-B)	YEFX0461299		IN Switch Lever	1	
10 (4-C)	YEFX009141		Slide Joint Lever	1	
11 (3-C)	YEFX0051597A		Switch Lever Spring	1	
12 (4-C)	YEFX0051600		Slide Joint Spring	1	
13 (4-A)(1-C)	YEFS011001		Pad (C)	3	
14 (1-B)	YEFX0051758		Joint Lever Spring	1	
15 (3-C)	YEFL02527		Spacer (B)	1	
16 (3-C)	YEFS01999		Pad (A)	2	
17 (3-C)	YEFS01999		Pad (F)	1	
18 (3-C)	YEFS011081		Pad (E)	1	
19 (2-B)	YEFA031175A		Upper Chassis Assy	1	
20	YEFL02526		Spacer (A)	1	
21 (3-C)	YEFX0051598		Gear Lever Spring	1	
22 (3-A)	YEP0BR5708AA		PCB w/Component	1	NLA
23 (3-B)	YEFX9991070A		Cover for PCB	1	
24 (3-B)	YEAE011972		5P Flat Cable	1	
25 (3-A)	YEFX0051590		Spring	1	
26 (3-B)	YEP0FX1698		Clamper Assy	1	
27 (3-B)	YEFS011002		Pad (D)	1	
28 (3-B)	YEFX0051591		Clamper Spring	1	
29 (3-A)	YEFS01804		Pad	1	
30 (2-B)(2-C)	YEFS04442		Dumper	4	

Ref. No.	Part No.	Part Code	Part Name & Description	Pcs set	Remarks
31 (2-C)	YEFX018265A		Dumper Bracket (B)	2	
32 (2-B)(2-C)	YEFX018264		Dumper Bracket (F)	2	
33 (2-C)	YEFX0461325		Lock Lever R Assy	1	
34 (2-C)	YEFX0461318		Joint Lever RA Assy	1	
35 (2-C)	YEFX9991078		Worm Cover	1	
36 (2-C)	YASAK01080		Loading Motor (YEP0FX2000)	1	
37 (1-C)	YEFX003517		Loading Gear (1)	1	
38 (2-B)	YEFX0461319		Joint Lever RB Assy	1	
39 (3-C)	YEFX0461317		Eject Lever Switch Assy	1	
40 (1-C)	YEFA09353A		Main Chassis Assy	1	
41 (1-C)	YEFX0051588		Slide Cam Spring	1	
42 (1-C)	YEFX234171A		Slide Cam R	1	
43 (1-C)	YEFX0051589		Feeder Arm Spring	2	
44 (1-B)	YEFX003518		Loading Gear 2	1	
45 (1-B)	YEFX003530		Friction Gear Assy	1	
46 (1-B)	YEFX003519		Loading Gear 3	1	
47 (2-A)	YEFX218248		Rubber Roller	1	
48 (2-A)	YEFX0051633		Lock Lever Spring	1	
49 (1-A)	YEFX003526		Roller Gear Assy	1	
50 (1-A)	YEFX0461309		Joint Lever LA	1	
51 (1-A)	YEFX0461321		Lock Lever LA Assy	1	
52 (1-A)	YEFX0461308		Lock Lever LB	1	
53 (1-A)	YEFX0461320		Feeder Arm Assy	1	
54 (4-B)	YEP0BR5843AA		PCB w/Component	1	
55 (2-B)(2-C)	YEFW04117		Roller Shaft	2	
100 (2-B)	YEAP2361		Flexible Printed Circuit Board	1	
101 (2-B)	YASAK01079		Travers Motor Assy (YEP0FX1697)	1	
102 (1-A)	YEFX003521		Worm Gear	1	
103 (1-A)	YEFX0051622		Worm Wheel	1	
104 (1-C)	YEFX0051630		Suspension Spring (F)	2	
105 (1-A)(1-C)	YEFX0051629		Suspension Spring (R)	2	

Ref. No.	Part No.	Part Code	Part Name & Description	Pcs set	Remarks
106 (4-A)	YEFS01849		Pad (D)	1	
107 (3-A)	YEFS011084		Pad (J)	2	
108 (2-B)	YEP0FX1814		Suspension Assy w/Optical Pick	1	
201	YEJT03081		Screw	5	
202	XYN2 + C10FX		Screw 2mmφ × 10mm	1	
203	XQN2 + A25FX		Screw 2mmφ × 25mm	2	
205 (4-B)(4-C)	YEJE01003		E-Ring	2	
206 (4-B)(4-C)	YEFL02530		Spacer	2	
207 (4-C)	YEFR05017		Rubber Ring	1	
208	YEFX014038		Snap Ring	2	
209 (4-C)	YEJW05116		Washer	1	
210 (4-B)	YEJW05038		Washer	1	
211 (4-C)	YEJW05074		Washer	1	
212	XYN2 + C4FX		Screw 2mmφ × 4mm	4	
213	YEJE01004		E-Ring	2	
214 (2-A)(2-B)	YAJW05011		Washer	2	
215	YEJE01014		E-Ring	1	
216	XSB2 + 3FX		Screw	2	
217	XYN2 + C5FX		Screw	1	
218	YEFX014008		Snap Ring	2	